CENTRAL MOTOR VEHICLES RULES, 19891

THE CENTRAL MOTOR VEHICLES RULES, 19891 CHAPTER I PRELIMINARY 1. Short title and commencement.—(l) These rules may be called the Central Motor Vehicle Rules, 1989. (2) Save as otherwise provided in sub-rule (3) 2[and sub-rule (2) of rule 103,] these rules shall come into force on the 1st day of July, 1989. (3) The provisions of 2[rule 9,] sub-rule (3) of rule 16, sub-rule (4) of rule 96, * *] s rule (3) of rule 105, rule 113, sub-rules (2), (3), (4) or (5) of rule 115, rules 118,122,124,125,126 and 127 shall come into force on such date as the Central Government may, by notification in the Official Gazette, appoint

2. Definitions.—ln these rules, unless the context otherwise requires— (a) "Act" means the Motor Vehicles Act, 1988 (59 of 1988); "agricultural tractor" means any mechanically propelled 4-wheel vehicle designed to work with suitable implements for various field operations and/or trailers to transport agricultural materials. Agricultural tractor is a non-transport vehicle; (c) "agricultural trailer" means a trailer generally left uncovered with single/double axle construction which is coupled to an agricultural tractor by means of two hooks and predominantly used for transporting agricultural materials;] "construction equipment vehicle" means rubber tyred (including pneumatic tyred), rubber padded or steel drum wheel mounted, self-propelled, excavator, loader, backhoe, compactor roller, dumper, motor grader, mobile crane, dozer, fork lift truck, self-loading concrete mixer or any other construction equipment vehicle or combination thereof designed for off-highway operations in mining, industrial undertaking, irrigation and general construction but modified and manufactured with "on or off" or "on and off" highway capabilities. Explanation.—A construction equipment vehicle shall be a non-transport vehicle the driving on the road of which is incidental to the main off-highway function and for a short 1 Vide G.S.R. 590 (E), dated 2-6-1989, published in the Gazelle of India, Ext., Pi. 11, S. 3, dated 2-6-1989. 2 Inserted by G.S.R. 933(E), dated 28-10-1989 (w.e.f. 28-10-1989). 3 The words and figures "sub-rule (3) of rule 103" omitted by G.S.R 221 (E), daled 28-3- 2001 (w.e.f. 28-3-2001). 4 Inserted by G.S.R. 338(E), dated 26-3-1993 (w.e.f. 26-3-1993). 5 Inserted by G.S.R. 642(E), dated 28-7-2000 (w.e.f. 28-7-2000). 1 duration at a speed not exceeding 50 kms per hour, but such vehicle does not include other purely off-highway construction equipment vehicle designed and adopted for use in any enclosed premises, factory or mine other than road network, not equipped to travel on public roads on their own power;] "financier" means a person or a title holder-cum-dealer who lets a motor vehicle on hire under an agreement of hire purchase or lease or hypothecation to the operator with a permission to get it registered in operator's name as registered owner;] "Form" means a Form appended to these rules; "section" means a section of the Act; "trade certificate" means a certificate issued by the registering authority under rule 35; "non-transport vehicle" means a motor vehicle which is not a transport vehicle. "Category L-l" means a motorcycle as defined in sub-section (27) of section 2 of the Act, with maximum design speed not exceeding 45 km/hour and engine capacity not exceeding 50 cc, if fitted with a thermic engine; (j) "Category L-2" means a motor cycle as defined in sub-section (27) of section 2 of the Act, with maximum design speed exceeding 45 km/hour and engine capacity exceeding 50 cc, if fitted with a thermic engine; (k) "Category M" means a motor vehicle with at least four wheels used for the carriage of passengers and their luggage; (l) "Category M-l" means a motor vehicle used for the carriage of passengers and their luggage and comprising no more than eight seats in addition to the driver's seat; (m) "Category M-2" means a motor vehicle used for the carriage of passengers and their luggage and comprising more than eight seats in addition to the driver's seat and having a maximum mass not exceeding 5 tonnes; (n) "Category M-3" means a motor vehicle used for the carriage of passengers and their luggage and comprising more than eight seats in addition to the driver's seat and having a maximum mass exceeding 5 tonnes; 6 Cl. {aa) inserted by G.S.R. 933(E), dated 28-10-1989 (w.e.f. 28-10-1989), relattered as Cl. (d) by G.S.R. 338(E), dated 26-3-1993 (w.e.f. 26-3-1993). 7 Substituted by G.S.R. 11 1 (E), dated 10-2-2004, for Cl. (d) (w.e.f. 10-2-2004). 8 CIS. (b) and (c) relettered as CIS. (e) and (l), respectively by G.S.R. 338(E), dated 26-3-1993 (w.e.f. 26-3-1993). 9 CIS. (d) and (e) relettered as CIS. (g) and (h), respectively by G.S.R. 338(E), dated 26-3-1993 (w.e.f. 26-3-1993). 10 Inserted by G.S.R. 400(E), dated 31-5-2002 (w.e.f. 31-5-2002). 2 (o) "Category N" means a motor vehicle with at least four wheels used for the carriage of goods; (p) "Category N-l" means a motor vehicle used for the carriage of goods and having a maximum mass not exceeding 3.5 tonnes; (q) "Category N-2" means a motor vehicle used for the carriage of goods and having a maximum mass exceeding 3.5 tonnes but not exceeding 12 tonnes; (r) "Category N-3" means a motor vehicle used for the carriage of goods and having a maximum mass exceeding 12 tonnes; 11 I(s) "Smart Card" means a device capable of storing data and executing commands which is a microprocessor chip mounted on a plastic card and the dimensions of the card and chip are specified in the International Organization for Standardization (ISO)/lnternational Electro Technical Commission (IEC) 7816 specifications, as may be amended from time to time, and shall be as per the specifications specified in Annexure Explanation.—For the purposes of this clause, microprocessor chip shall have non-volatile re- writable memory capacity of minimum 4 Kilo Byte consisting of application data, file headers, security definitions, and a maximum of 350 bytes for Operating System Interfacing, as specified by the Ministry of Road Transport and Highways from time to time for

Driving Licence and Registration Certificate applications; "International Driving Permit" means the licence issued by a licensing authority in India under Chapter 11 of the Act to an Indian National authorising the person specified therein to drive any categories of motor vehicles as specified in

Form 6-A in the areas or territories of countries other than India but excluding the countries with whom there are no diplomatic relations;] "Battery Operated Vehicle" means a vehicle adapted for use upon roads and powered exclusively by an electric motor whose traction energy is supplied exclusively by traction battery installed in the vehicle: Provided that if the following conditions are verified and authorised by any testing agency specified in rule 126, the battery operated vehicle shall not be deemed to be a motor vehicle. (i) the thirty minutes power of the motor is less than 0.25 kW.; (ii) the maximum speed of the vehicle is less than 25 km/h; 11 Substituted by G.S.R. 513(E), dated 10-8-2004 (w.e.f. 10-9-2004). 12 Inserted by G.S.R. 720(E), dated 10-9-2003 (w.e.f. 10-10-2003). 13 Inserted by G.S.R. 589(E), dated 16-9-2005 (w.e.f. 16-9-2005). 3 (iii) bi-cycles with pedal assistance which are—(a) equipped with an auxiliary electric motor having a thirty minute power less than 0.25 kW, whose output is progressively reduced and finally cut off as the vehicle reaches a speed of 25 km/h, or sooner, if the cyclist stops pedaling; and (b) fitted with suitable brakes and retro-reflective devices, i.e., one white reflector in the front and one red reflector at the rear. Explanation.—The thirty minute power of the motor is defined in AIS: 049:2003 and method of verification is prescribed in AIS: 041 :2003, till the corresponding BIS specifications are notified under the Bureau of Indian Standards Act, 1986 (63 of 1986); (v) "Power tiller" means an agricultural machinery used for soil preparation having a single axle in which the direction of travel and its control for field operation is performed by the operator walking behind it. This equipment may or may not have a riding attachment and when coupled to a trailer can be used for the transportation of goods. The maximum speed of the power tiller when coupled to a trailer, shall not exceed 22 km/h. The maximum haulage capacity of the Power tiller coupled to a trailer shall not exceed 1.5 tons.] CHAPTER 11 LICENSING OF DRIVERS OF MOTOR VEHICLES General 3. General.—The provisions of sub-section (1) of section 3 shall not apply to a person while receiving instructions or gaining experience in driving with the object of presenting himself for a test of competence to drive, so long as— (a) such person is the holder of an effective learner's licence issued to him in Form 3 to drive the vehicle; (b) such person is accompanied by an instructor holding an effective driving License to drive the vehicle and such instructor is sitting in such a position to control or stop the vehicle; and (c) there is painted, in the front and the rear or the vehicle or on a plate or card affixed to the front and the rear, the letter "L" in red on a white background as under:— Note.—The painting on the vehicle or on the plate or card shall not be less than 18 centimeters square and the letter "L" shall not be less than 10 centimeters high, 2 centimeters thick and 9 centimeters wide at the bottom: 4 Provided that a person, while receiving instructions or gaining experience in driving a motor cycle (with or without a side-car attached), shall not carry any other person on the motor cycle except for the purpose and in the manner referred to in clause (b). 14[4. Evidence as to the correctness of address and age.—Every applicant for the issue of a licence under this Chapter shall produce as evidence of his address and age, any one or more of the following documents in original or relevant extracts thereof duly attested by a Gazette Officer of the Central Government or of a State Government or an officer of a local body who is equivalent in rank of a Gazetted Officer of the Government or Village Administration Officer or Municipal Corporation Councillor or Panchayat President, namely:— 2. Electoral Roll, 3. Life insurance Policy, 4. Passport, 6. Pay slip issued by any office of the Central Government or a State Government or a local body, 8. School certificate, 9. Birth certificate, 10. Certificate granted by a registered medical practitioner not below the rank of a Civil Surgeon, as to the age of the applicant, 18[1 1 . Any other document or documents as may be prescribed by the State Government under clause (k) of section 28:] Provided that where the applicant is not able to produce any of the above-mentioned documents for sufficient reason, the licensing authority may accept any affidavit sworn 14 R. 4 substituted by G.S.R. 338(E), dated 26-3-1993 (w.e.f. 26-3-1993). 15 Item No. 1 "1 . Ration Card" omitted by G.S.R.589(E),dated 16-9-2005 (vv.e.f.16-9-2005). 16 Item No. 3-A "3-A. Janta Insurance Policy" omitted by G.S.R. 76(E), dated 31-1-2000 (w.e.f. 31-1-2000). Earlier it was inserted by G.S.R. 684(E), dated 15-10-1999 (w.e.f 22-10-1999). Item No. 5 "5. Electricity or Telephone Bill" and Item No. 7 "7. Mouse Tax Receipt" omitted by G.S.R. 221 (E), dated 28-3-2001 (w.e.f. 28-3-2001). Before that Item Nos. 5,6 and 7 were inserted b} G.S.R. 76(E), dated 31-1-2000 (w.e.f. 31-1-2000). Item 11 inserted by G.S.R. 589(E), dated 16-9-2005 (w.e.f. 16-9-2005). 5 by the applicant before an Executive Magistrate, or a First Class Judicial Magistrate or a Notary Public as evidence of age and address.] Every application for the issue of a learner's licence or a 5. Medical certificate driving licence or for making addition of another class or description of a motor vehicle to a driving licence or for renewal of

a driving licence to drive a vehicle other than a transport vehicle shall be accompanied by a self-declaration as to the physical fitness as in Form 1 and every such application for a licence to drive a transport vehicle shall be accompanied by a medical certificate in Form I-A issued by a registered medical practitioner referred to in sub-section (3) of section 8.] An application for a medical certificate shall contain a declaration in Form 1 . (3) A medical certificate issued in Form I-A shall be valid for a period of one year from the date of its issue. It shall be accompanied by a passport size copy of the photograph of the applicant.] 6. Exemption from production of medical certificate.—Any person who has, after the date of commencement of these rules, produced a medical certificate in connection with the obtaining of a learner's licence or a driving licence, whether for initial issuance or for renewal thereof, or for addition of another class of motor vehicles to his driving licence, shall not be required to produce a medical certificate, except where the application is made for the renewal of a driving licence

7. Affixing of photograph to medical certificate.—A photograph of the applicant shall be affixed at the appropriate place shown in 21[

Form I-A] and the registered medical practitioner shall affix his signature and seal to the said photograph in such a manner that the signature and the seal appear partly on the photograph and partly on the form of the medical certificate: 8. Minimum educational qualification for driving transport vehicles.—[Omitted by G.S.A. 933(E). dated 28-10-1989 (w.e.f. 28-10-1989).] 23[9. Educational qualifications for drivers of goods carriages carrying dangerous or hazardous One year from the date of commencement of Central Motor 19 Sub-R. (1) substituted by G.S.R. 221 (E), dated 28-3-2001 (w.e.f. 28-3-2001). Before thai sub-R (1) substituted by G.S.R. 684(E), dated 5-10-1999 (w.e.f. 5-10-1999). 20 Inserted by G.S.R. 933(E), dated 28-10-1989 (w.e.f. 28-10-1989). 21 Substituted by G.S.R. 933(E), dated 28-10-1989, for "Form 1" (w.e.f. 28-10-1989). 22 Proviso omitted by G.S.R. 933(E), dated 28-10-1989 (w.e.f. 28-10-1989). 23 R. 9 substituted by G.S.R. 933(E), dated 28-10-1989 (w.e.f. 28-10-1989). 6 Vehicles (Amendment) Rules, 1993, any person driving a goods carriage carrying goods of dangerous or hazardous nature to human life shall, in addition to being the holder of a driving licence to drive a transport vehicle, also has the ability to read and write at least one Indian language out of those 25[specified in the VIII Schedule of the Constitution] and English and also possess a certificate of having successfully passed a course consisting of following syllabus and periodicity connected with the transport of such goods. A. Period of training Place of training Syllabus Defensive driving Questionnaire Cause of accidents Accidents' statistics Driver's personal fitness Car condition Braking distance Highway driving Road/ Pedestrian crossing Railway crossing Adapting to weather 1 lead on collision Rear end collision Night driving Films and discussion B. Advanced driving skills and training (l) Discussion Before starting During driving Before stopping After stopping 3 days At any institute recognised by the State Government Duration of training for A & st and 2nd day Checklist outside/below/near vehicle product side inside vehicle correct speed/gear signalling lane control overtaking/ giving side speed limit/safe distance driving on slopes sale stopping place, signalling, road width, condition preventing vehicle movement wheel clocks 24 Sub-R. (l) substituted by G.S.R. 338(E), dated 26-3-1993 (w.e.f. 26-3-1993). 25 Substituted by G.S.R. 221 (E), dated 28-3-2001 (w.e.f. 28-3-2001 7 26[Night driving (ii') Field test/training C. Product safety UN Panel Product information Emergency procedure vehicle attendance mandatory lighting requirements headlamp alignment use of dipped beam] 1 driver at a lime UN classification Hazchem Code Toxicity, flammability, other definitions Tremcards CIS/MSDS Dura tion of training for (C) Third day. Importance of temperature pressure, level Explosive limits Knowledge about equipment Communication Spillage handling Use of PPE Fire fighting First Aid Toxic release control Protection of wells, rivers, lakes, etc. Use of protective equipment Knowledge about valves, etc.] (2) The holder of a driving licence possessing the minimum educational qualification or the certificate referred to in sub-rule (1), shall make an application in writing on a plain paper alongwith his driving licence and the relevant certificate to the licensing authority hi whose jurisdiction he resides for making necessary entries in Ms driving licence and if the driving licence is in Form 11 the application shall be accompanied by the fee as is referred to in Serial No. 8 of the Table to rule 32. (3) The licensing authority, on receipt of the application referred to in sub-rule (2), shall make an endorsement in the driving licence of the applicant to the effect that he is authorised to drive a goods carriage carrying goods of dangerous or hazardous nature to human life. (4) A licensing authority other than the original licensing authority making any such endorsement shall communicate the fact to the original licensing authority.] Learner's licence 10. Application for learner's licence.—An application for the grant or renewal of a learner's licence shall be made in Form 2 and shall be accompanied by,— (a) save as otherwise provided in rule 6, a medical certificate in -27 [Form I-A]. 26 Substituted by G.S.R. 214(E), dated 18-3-1999 (w.e.f. 18-3-1999). 8 (b) three copies of the applicant's recent 28[passport size photograph], (c) appropriate fee as specified in rule 32, (d) the case of an application for 29[transport vehicle], the driving licence held by the applicant

11. Preliminary test.—(l) Save as otherwise provided in sub-rule (2), every applicant for a learner's licence shall present himself before the licensing authority on such date, place and time, as the licensing authority may appoint, for a test and satisfy such authority that the applicant possesses adequate knowledge and understanding of the following matters, namely:— (a) the traffic signs, traffic signals and the rules of the road regulations made under section 118; (b) the duties of a driver when his vehicle is involved in an accident resulting in the death or bodily injury to a person or damage to property of a third party; (c) the precautions to be taken while passing an unmanned railway crossing; and (d) the documents he should carry with him while driving a motor vehicle. -A) In determining as to whether an applicant possesses adequate knowledge and understanding of the matters referred to in sub-rule (1), the licensing authority shall put to the applicant questions of objective type such as specified in Annexure VI. Explanation.—For the purpose of this sub-rule, "adequate knowledge" means answering correctly at least 60 per cent of the questions put to him.] (2) Nothing contained in sub-rule (1) shall apply to the following class of applicants, namely:— (a) the holder of an effective driving licence, (b) the holder of a driving licence which has expired but five years have not elapsed, (c) the holder of a learner's licence issued or renewed after the commencement of these 31 [(d) the holder of a certificate to the effect of the possession of adequate knowledge and understanding of the matters referred to in sub-rule (1), issued by any institution recognized and notified in this regard by the State Government.] 27 Substituted by G.S.R. 933(E), dated 28-10-1989, for "

Form 1" (w.e.f. 28-10-1989). 28 Substituted by G.S.R. 933(E), dated 28-10-1989, for "photograph of the size live centimeters" (w.e.f. 28-10-1989). 29 Substituted by G.S.R. 400(E), dated 31-5-2002, for "medium goods vehicle, a medium passenger motor vehicle, a heavy goods vehicle, or a heavy passenger motor vehicle" (w.e.f. 31- 5-2002). 30 Inserted by G.S.R. 933(E), dated 28-10-1989 (w.e.f. 28-10-1989). 9

12. Consent of parent or guardian, in the case of application by minor.—ln the case of an application for a learner's licence to drive a 32[motor cycle without gear] by an applicant under the proviso to sub-section (1) of section 4, the application shall be signed by the parent or guardian of the applicant

Form 3. Driving licence 14. Application for a driving An application for a driving licence shall be made in Form 4 and shall be accompanied by,— (a) an effective learner's licence to drive the vehicle of the type to which the application relates; (b) appropriate fee as specified in rule 32, for the test of competence to drive and issue of licence; (c) three copies of the applicant's recent 34[passport size photograph]; (d) save as otherwise provided in rule6,a medical certificate in 35[Form 1 -A]; (e) a driving certificate in Form 5 issued by the school or establishment from where the applicant received instruction, if any. An application for an International Driving Permit shall be made in Fonn 4-A and shall be accompanied by— (a) valid driving licence issued by the licensing autho rity und er these ru les; (b) appropriate fee as specified in rule 32; (c) three copies of the applicant's recent passport photograph; (d) a medical certificate in Form I-A; (e) valid proof of Indian Nationals; if valid proof of passport; and (g) valid proof of visa, wherever applicable.] 31 Inserted by G.S.R. 221 (E), dated 28-3-2001 (w.e.f. 28-3-2001). Earlier Cl. (d) was omitted by G.S.R. 76(E), dated 31-1-2000 (w.e.f. 31-1-2000). Before that it was inserted by G .S. R. 684(E), da ted 5-10-1999 (w.e. f. 22-10-1999). 32 Substituted by G.S.R. 76(E), dated 31-1-2000, for "motor cycle with engine capacity not exceeding 50cc" (w.e.f. 31-1-2000). Earlier these words were substituted by G.S.R. 684(E), dated 5-10-1999 (w.e.f. 22-10-1999) 33 R. 14 renumbered as sub-R. (1) thereof by G.S.R 720(E), dated 10-9-2003 (w.e.f. 10-10-2003). 34 Substituted by G.S.R. 933(E), dated 28-10-1989, for "photograph of the size of five centimetres b! six centimetres" (w.e.f. 28-10-1989). Substituted by G.S.R. 933(E), dated 28-10-1989, for "Form 1" (w.e.f. 28-10-1989). 36 Inserted by G.S.R. 720(E), dated 10-9-2003 (w.e.f. 10-10-2003). 10

15. Driving test.—(l) No person shall appear for the test of competence to drive unless he has held a learner's licence for a period of at least 37[thirty days]. (2) The test of competence to drive referred to in sub-section (3) of section 9 shall be conducted by the licensing authority or such other person as may be authorised in this behalf by the State Government in a vehicle of the type to which the application relates. (3) The applicant shall satisfy the person conducting the test that he is able to— (a) adjust rear-view mirror; (b) take suitable precautions before starting the engine; (c) move away safely and smoothly straight ahead at an angle, while at the same time engaging all gears until the top gear is reached; (d) to change to the lower gears quickly from the top gear when the traffic conditions warrant such change; (e) change quickly to lower gears when driving downhill; if stop and re-start the vehicle on a steep upward incline making proper use of the hand-brake or of the throttle and the foot-brake without any rolling back, turn right and left corners correctly and make proper use of the rear-view mirror before signalling; (g) overtake, allow to be overtaken, meet or cover the path of other vehicles safely and take an appropriate course of the road with proper caution giving appropriate signals; (h) give appropriate traffic signals at the appropriate time, in clear and unmistakable manner by hand or by electrical indicators fitted to the vehicle; (i) change the lanes with proper signals and with due care; (j) stop the vehicle in an emergency or otherwise, and in the latter case, bring it to rest at an appropriate course on the road safely, giving appropriate signals; (k) m the case of vehicle having a reverse gear, driving the vehicle backwards, reverse it into a limited opening either to the right or left under control and with reasonable accuracy; (l) cause the vehicle to face in the opposite direction by means of forward and reverse gears; (m) take correct and prompt action on the signals given by traffic signs, traffic lights, traffic controllers, policemen and take appropriate action on signs given by other road users; 37 Substituted by G.S.R. 933(E), dated 28-10-1989, for "six weeks" (w.e.f. 28-10-1989). 11 (n) act correctly at pedestrian crossings, which is not regulated by traffic lights or traffic police, by giving preference to persons crossing the roads; (o) keep well to the left in normal driving; (p) regulate speed to suit varying road and traffic conditions; (q) demonstrate general control of the vehicle by confident steering and smooth gear changing and braking as and when necessary; (r) make proper use of the rear-view mirror before signalling, beginning manoeuvring, moving away, altering the course to overtake, turning right or stopping; (s) use proper side when driving straight, turning right, turning left and at junction of the road; (t) make proper use of accelerator, clutch, gears, brakes (hand and foot) steering and horn; (u) anticipate the actions of pedestrians, drivers of other vehicles and cyclists; (v) take precautions at cross roads and on road junctions with regard to:— (i) adjustment of speed on approach, (ii) proper use of rear-view mirror, (iii) correct positioning of the vehicle before and after turning to the right or left, (iv) avoidance of cutting right hand corners, (v) looking right, left and right again before crossing or emerging; (w) concentrate in driving without his attention being distracted and to

demonstrate the presence of mind; (x) show courtesy and consideration for the safety and convenience of other road users, such as pedestrians, drivers of other motor vehicles or cyclists

16. Form of driving licence.—(l) Every driving licence issued or renewed by a licensing authority shall be in Form 6. (2) Where the licensing authority has the necessary apparatus, 38[for the issue of a laminated card type or Smart Card type driving licence, such card type or Smart Card type driving licence, as may be specified in the Notification issued by the concerned State Government or Union Territory Administration,] shall be in Form 7. (3) On and from the date of commencement of this sub-rule, every driving licence issued or renewed by the licensing authority shall be in Form 7. 38 . Substituted by G.S.R. 400(E), dated 31-5-2002, for "for the issue of a laminated card type driving licence, such card type driving licence" (w.e.f. 31-5-2002). 12 Every International Driving Pemit issued by a licensing authority shall be in Form 6- A and shall be valid for a period of not more than one year from the date of issue, as the case may be, or till the validity of the driving licence, whichever is earlier. (5) The automobile associations authorised by the State Government/ Union Territory Administration shall be allowed to issue International Driving Permit to their own members as also others subject to counter-signature by competent authority.] 17. Addition to driving licence.—(l) An application for addition of another class or description of motor vehicle to the driving licence shall be made in Form 8 to the licensing authority and shall be accompanied by— (r) make proper use of the rear-view mirror before signaling, beginning maneuvering, moving away, altering the course to overtake, turning right or stopping; (s) use proper side when driving straight, turning right, turning left and at junction of the road; (t) make proper use of accelerator, clutch, gears, brakes (hand and foot) steering and horn; (u) anticipate the actions of pedestrians, drivers of other vehicles and cyclists; (v) take precautions at cross roads and on road junctions with regard to:— (i) adjustment of speed on approach, (ii) proper use of rear-view mirror, (iii) correct positioning of the vehicle before and after turning to the right or left, (iv) avoidance of cutting right hand corners, (v) looking right, left and right again before crossing or emerging; (w) concentrate in driving without his attention being distracted and to demonstrate the presence of mind; (x) show courtesy and consideration for the safety and convenience of other road users, such as pedestrians, drivers of other motor vehicles or cyclists

16. Form of driving licence.—(l) Every driving license issued or renewed by a licensing authority shall be in Form 6. 40[for the issue of a (2) Where the licensing authority has the necessary apparatus, laminated card type or Smart Card type driving licence, such card type or Smart Card 39 Inserted by G.S.R. 720(E), dated 10-9-2003 (w.e.f. 10-10-2003). 40 Substituted by G.S.R. 400(E), dated 31-5-2002, for "for the issue of a laminated card type driving licence, such card type driving licence" (w.e.f. 31-5-2002). 13 type driving licence, as may be specified in the Notification issued by the concerned State Government or Union Territory Administration,] shall be in Form 7. (3) On and from the date of commencement of this sub-rule, every driving licence issued or renewed by the licensing authority shall be in Form 7. 41 [(4) Every International Driving Pennit issued by a licensing authority shall be in Form 6-A and shall be valid for a period of not more than one year from the date of issue, as the case may be, or till the validity of the driving licence, whichever is earlier. (5) The automobile associations authorised by the State Government/ Union Territory Administration shall be allowed to issue International Driving Permit to their own members as also others subject to counter-signature by competent authority.] 17. Addition to driving licence.—(l) An application for addition of another class or description of motor vehicle to the driving licence shall be made in Form 8 to the licensing authority and shall be accompanied by— (a) an effective learner's licence and driving licence held by applicant; (b) in the case of an application for addition of a transport vehicle, the driving certificate in Form 5; (d) appropriate fee as specified in rule 32. (2) The provisions of sub-section (1), sub- section (3) and sub-section (4) of section 9 shall, insofar as may be, apply in relation to an application under subsection (1) as they apply in relation to an application for the grant of a driving licence

Form 9 to the licensing authority having jurisdiction over the area in which the applicant ordinarily resides or carries on business and shall be accompanied by— (a) appropriate fee as specified in rule 32; (b) three copies of the applicant's recent 41 ,[passport size photograph], if renewal is to be made in Form 6, (c) the driving licence, (d) the medical certificate in 43[Form I-A]. 41 Inserted by G.S.R. 720(E), dated 10-9-2003 (w.e.f. 10-10-2003). 42 Cl. (c) omitted by G.S.R. 933(E), dated 28-10-1989 (w.e.f. 28-10-1989). 43 Substituted by G.S.R. 933(E), dated 28-10-1989, for "photograph of the size of five centimetres by six centimetres" (w.e.f. 28-10-1989). 14 (2) Where the driving licence authorises the holder of such licence to drive a transport vehicle as well as any other vehicle, then the licensing authority shall, subject to the production of medical certificate, renew such licence for the appropriate period as specified in sub-section (2) of section 14

19. Refund of fee.—Where the licensing authority rejects an application for the renewal of a driving licence under sub-section (5) of section 15, it shall refund half of the fee paid for such renewal to the applicant, on an application made by him in that behalf not later than thirty days from the date of receipt of the order rejecting the application

20. Driving licence to drive motor vehicle belonging to the Defence Department.—The authorities for the purpose of sub-section (1) of section 18 shall be— (i) all the officers-commanding of Units of Army of and above the rank of Major; (ii) all the officers-commanding of Units of Navy of and above the rank of Lieutenant Commander; (iii) all the officers-commanding of Units of Air Force of and above the rank of Squadron Leader. Disqualification 21. Powers of licensing authority to disqualify.—For the purpose of clause (J) of sub- section (1) of section 19, the commission of the following acts by holder of a driving licence shall constitute nuisance or danger to the public, namely:— (1) Theft of motor vehicle. (2) Assault on passengers. (3) Theft of personal effects of passengers. (4) Theft of goods carried in goods carriages. (5) Transport of goods prohibited under any law. Driver, while driving a transport vehicle, engages himself in activity which is likely to disturb his concentration.] (7) Abduction of passengers. (8) Carrying overload in goods carriages. (9) Driving at speed exceeding the specified limit. (10) Carrying persons in goods carriage, either inside the driver's cabin in excess of its capacity or on the vehicle, whether for hire or not. (11) Failing to comply with the provisions of section 134. (12) Failure to stop when signaled to do so by any person authorised to do so. 44 Cl. (6) substituted by G.S.R. 933(E), dated 28-10-1 989(w.e.f. 28-10-1989). 15 (13) Misbehaviour with and showing discourtesy to passengers, intending passengers or consignors and consignees of goods. (14) Smoking while driving public service vehicles. (15) Abandoning vehicle in a public place causing inconvenience to other road users or to passengers in the vehicle. (16) Driving vehicle while under the influence of drink or drugs. (17) Interfering with any person mounting or preparing to mount upon any other vehicle. (18) Allowing any person to sit or placing things in such a way as to impede the driver from having a clear vision of the road or proper control of the vehicle. (19) Not stopping a stage carriage at approved stopping places for a sufficient period of time in a safe and convenient position upon demand or signal of the conductor or any passenger desiring to alight from the vehicle and unless there is no room in the vehicle, upon demand or signal of any person desiring to becoming a passenger. (20) Loitering or unduly delaying any journey and not proceeding to the destination as near as may be in accordance with the time table pertaining to the vehicle, or, where there is no such time table, with all reasonable despatch. (21) Not driving a contract carriage, in the absence of a reasonable cause, to the destination named by the hirer by the shortest route. (22) The driver of a motor cab not accepting the first offer of hire which may be made to him irrespective of the length of the journey for which such offer is made. (23) The driver of a motor cab demanding or extracting any fare in excess to that to which he is legally entitled or refusing to ply motor cab. Abandoning a transport vehicle as a mark of protest or agitation of any kind or strike in a public place or in any other place in a manner causing obstructions and inconvenience to the public or passengers or other users of such places.] Using mobile phone while driving a vehicle.] Endorsement in driving licence 22. Endorsement by Courts.—A Court convicting a holder of a licence, for any one of the offences specified hereunder, shall endorse or cause to be endorsed in the driving licence, the particulars of such conviction, namely:— (a) Driving without a licence, or without a licence which is effective, or without a licence applicable to the vehicle driven (section 3). 45 Cl. (24) substituted by G.S.R. 933(E), dated 28-10-1989 (w.e.f. 28-10-1989). Inserted by G.S.R. 221 dated 28-3-2001 (w.e.f. 28-3-2001). 16 (b) Allowing a licence to be used by another person (section 6(2)). (c) Driving when disqualified (section 23). (d) Driving an unregistered vehicle (section 39). (e) Driving a transport vehicle not covered by a certificate of fitness (section 56). (f) Driving a transport vehicle in contravention of section 66. (g) Driving in contravention of rule 118. (h) Failure to comply with provisions of section 114. (i) Refusing or failing within specified time to produce licence or certificate of registration (section 130). (j) Failing to stop vehicle as required under section 132. (k) Obtaining or applying for a licence without giving particulars of endorsement (section 182). (l) Driving at excessive speed (section 183). (m) Driving dangerously (section 184). (n) Driving while under the influence of drink or drugs (section 185). (o) Driving when mentally or physically unfit to drive (section 186). (p) Abetment of an offence punishable under section 183 or 186. (q) Abetment of offence specified in section 188. (r) Taking part in an unauthorised race or trial of speed, (section 189). (s) Using vehicle in unsafe condition (section 190). (t) Driving vehicle exceeding punishable limit or weight (section 194). (u) Altering a licence or using an altered licence. (v) An offence punishable with imprisonment in the commission of which a motor vehicle was used. State Register 23. State Register of driving licences.—(l) Each State Government shall maintain a State Register of driving licences in respect of driving licences issued and renewed by the licensing authorities in the State in

Form 10. (2) Each State Government shall send to the Director (Transport Research), Ministry of Surface Transport, New Delhi, a printed copy of the register referred to in sub-rule (1). Driving Schools and Establishments 24. Driving schools and establishments.—(l) No person shall establish or maintain any driving school or establishment for imparting instructions for hire or reward in driving motor vehicles without a licence in Form 11 granted by the licensing authority. 17 (2) An application for the grant or renewal of a licence under sub-rule (1) shall be made in Form 12 or Form 13, as the case may be, to the licensing authority having jurisdiction in the area in which the school or establishment is situated and shall be accompanied by appropriate fee as specified in rule 32. Explanation.—For the purposes of this rule and rules 25 to 28 "licensing authority" means an officer not below the rank of the Regional Transport Officer of the Motor Vehicles Department established under section 213. (3) The licensing authority shall, when considering an application for the grant or renewal of a licence under this rule, have regard to the following matters, namely:— (i) the applicant and the staff working under him are of good moral character and are qualified to give driving instructions; (ii) the premises where the school or establishment is proposed to be conducted is either owned by the applicant or is taken on lease by him or is hired in his name and it has 47 adequate provision for [conducting lecture and demonstration of models] besides adequate parking area for the vehicles meant to be used for imparting instructions in driving: Provided that in respect of schools or establishments imparting instructions in driving of motor vehicles or matters connected therewith immediately before the commencement of these rules, the licensing authority may permit the conducting of instruction facilities in the same premises where the school or establishment is housed for a period of six months, notwithstanding the fact that the premises do not satisfy the conditions laid down in this clause; (iii) the financial resources of the proposed school or establishment are sufficient to provide for its continued maintenance; (iv) the applicant owns and maintains a minimum of one motor vehicle each of the type in which instruction is imparted in the school or establishment; (v) the vehicles are available exclusively for purposes of imparting instruction and all such vehicles, except motor cycles, are fitted with dual control facility to enable the instructor to control or stop the vehicle; (vi) the applicant maintains the following apparatus, equipment and other requirements, namely:— 47 Substituted by G.S.R. 933(E), coated 28-10-1989, for "a lecture hail, room for demonstration of models, administrative section, reception room and sanitary block" (w.e.f. 28-10-1989). 18 (a) a blackboard, (b) a road plan board with necessary model signals and charts, (c) traffic signs chart, (d) chart on automatic signals and signals given by traffic controllers where there are no automatic signals, (e) a service chart depicting a detailed view of all the components of a motor vehicle, 48[brake shoe and drums] (except where the applicant (f) engine gear box, desires to impart instruction in the driving of motor cycles only), (g) puncture kit with tyre lever, wheel brace, jack and tyre pressure gauge, (h) spanners (a set each of fix spanners, box spanners, pliers, screw drivers, screw spanners, and hammer), (i) driving instructions manual, (j) benches and tables for trainees and work bench, (m) a 50[collection] of books on automobile mechanism, driving, road safety, traffic 51 * regulations, laws relating to motor vehicles and related subjects [(n) a fully equipped first-aid box for use in emergency at the premises; (viii) The applicant or any member of the staff employed by him for imparting instructions possesses the following qualifications, namely:— (a) a minimum educational qualification of a pass in the 1 0th standard, (b) a minimum driving experience of five years in addition to a certificate in a course in motor mechanics or any other higher qualification in mechanical engineering from an institution established by the Central or a State Government or from an institution recognised by the Board of Technical Education of a State Government, 8 Substituted by G.S.R. 933(E), dated 28-10-1989, for certain words (w.e.f. 28-10-1989). CIS. (k) and (Z) omitted by G.S.R. 933(E), dated 28-10-1989 (w.e.f. 28-10-1989). Substituted by G.S.R. 933(E), dated 28-10-1989, for "library consisting" (w.e.f. 28-10-1989). . The words "both in English and the regional languages" omitted by G.S.R. 933(E), dated 28-10-1989 (w.e.f. 28-10-1989). 2 Cl. (vii) omitted by G.S.R. 933(E), dated 28-10-1989 (w.e.f. 28-10-1989). 19 (c) thorough knowledge of traffic signs specified in the Schedule to the Act and the regulations made under section 1 18, (d) ability to demonstrate and to explain the functions of different components, parts of the vehicles, (e) adequate knowledge of English or the regional language of the region in which the school or establishment is situated: Provided that any person who has served as an instructor for a period of not less than five years immediately before the commencement of these rules, is exempted from the requirements of this sub-clause. (2) Each State Government shall send to the Director (Transport Research), Ministry of Surface Transport, New Delhi, a printed copy of the register referred to in sub-rule

(1). Driving Schools and Establishments 24. Driving schools and establishments.—(l) No person shall establish or maintain any driving school or establishment for imparting instructions for hire or reward in driving motor vehicles without a licence in Form 11 granted by the licensing authority. (2) An application for the grant or renewal of a licence under sub-rule (1) shall be made in Form 12 or Form 13, as the case may be, to the licensing authority having jurisdiction in the area in which the school or establishment is situated and shall be accompanied by appropriate fee as specified in rule 32. Explanation.—For the purposes of this rule and rules 25 to 28 "licensing authority" means an officer not below the rank of the Regional Transport Officer of the Motor Vehicles Department established under section 213. (3) The licensing authority shall, when considering an application for the grant or renewal of a licence under this rule, have regard to the following matters, namely:— (i) the applicant and the staff working under him are of good moral character and are qualified to give driving instructions; (ii) the premises where the school or establishment is proposed to be conducted is either owned by the applicant or is taken on lease by him or is hired in his name and it has adequate provision for 53[conducting lecture and demonstration of models] besides adequate parking area for the vehicles meant to be used for imparting instructions in driving: 53 Substituted by G.S.R. 933(E), coated 28-10-1989, for "a lecture hall, room for demonstration of models, administrative section, reception room and sanitary block" (w.e.f. 18-10-1989). 20 Provided that in respect of schools or establishments imparting instructions in driving of motor vehicles or matters connected therewith immediately before the commencement of these rules, the licensing authority may permit the conducting of instruction facilities in the same premises where the school or establishment is housed for a period of six months, notwithstanding the fact that the premises do not satisfy the conditions laid down in this clause; (iii) the financial resources of the proposed school or establishment are sufficient to provide for its continued maintenance; (iv) the applicant owns and maintains a minimum of one motor vehicle each of the type in which instruction is imparted in the school or establishment; (v) the vehicles are available exclusively for purposes of imparting instruction and all such vehicles, except motor cycles, are fitted with dual zontrol facility to enable the instructor to control or stop the vehicle; (vi) the applicant maintains the following apparatus, equipment and Dther requirements, namely:— (a) a blackboard, (b) a road plan board with necessary model signals and charts, (c) traffic signs chart, (d) chart on automatic signals and signals given by traffic controllers where there are no automatic signals, (e) a service chart depicting a detailed view of all the components of a motor vehicle, (f) engine gear box, 54[brake shoe and drums] (except where the applicant desires to impart instruction in the driving of motor cycles only), (g) puncture kit with tyre lever, wheel brace, jack and tyre pressure gauge, (h) spanners (a set each of fix spanners, box spanners, pliers, screw drivers, screw spanners, and hammer), (i) driving instructions manual, (j) benches and tables for trainees and work bench, 55 * 55 * (m) a 56[collection] of books on automobile mechanism, driving, road safety, traffic 57 * regulations, laws relating to motor vehicles and related subjects [54 Substituted by G.S.R. 933(E), dated 28-10-1989, for certain words (w.e.f. 28-10-1989). 55 CIS. (k) and (Z) omitted by G.S.R. 933(E), dated 28-10-1989 (w.e.f. 28-10-1989). 56 Substituted by G.S.R. 933(E), dated 28-10-1989, for "library consisting" (w.e.f. 28-10-1989). 21 (n) a fully equipped first-aid box for use in emergency at the premises; (viii) The applicant or any member of the staff employed by him for imparting instructions possesses the following qualifications, namely:— (a) a minimum educational qualification of a pass in the 1 0th standard, (b) a minimum driving experience of five years in addition to a certificate in a course in motor mechanics or any other higher qualification in mechanical engineering from an institution established by the Central or a State Government or from an institution recognised by the Board of Technical Education of a State Government, (c) thorough knowledge of traffic signs specified in the Schedule to the Act and the regulations made under section 118, (d) ability to demonstrate and to explain the functions of different components, parts of the vehicles, (e) adequate knowledge of English or the regional language of the region in which the school or establishment is situated: Provided that any person who has served as an instructor for a period of not less than five years immediately before the commencement of these rules, is exempted from the requirements of this sub-clause. (4) The licensing authority may, on receipt of an application under sub-rule (2) and after satisfying that the applicant has complied with the requirements of sub-rule (3), grant or renew a licence in Form 11 59[within a period of ninety days from receipt of such an application], (5) No application for licence shall be refused by the licensing authority unless the applicant is given an opportunity of being heard and reasons for such refusal are given in writing by the licensing authority

25. Duration of a licence and renewal thereof.—A licence granted in Form 11 shall be in force for a period of five years and may be renewed on an application in Form 13 made to the licensing authority which granted the licence not less than sixty days before the date of its expiry: 57 The words "both in English and the regional languages" omitted by G.S.R. 933(E), dated 28- 10-1989 (w.e.f. 28-10-1989). 58 Cl. (vii) omitted by G.S.R. 933(E), dated 28-10-1989 (w.e.f. 28-10-1989). 59 Inserted byG.S.R. 16-9-2005 (w.e.f. 16-10-2005). 22 60[Provided that the validity of the said licence shall be subject to fulfilling the criteria as prescribed by the State Government, which shall be certified by the licensing authority or any other authority as may be prescribed for the purpose by the State Government on an annual basis.] 26. Issue of duplicate licence.—(l) If at any time a licence granted under sub-rule (4) of rule 24 is lost or destroyed, the holder of the licence shall forthwith intimate the loss to the licensing authority which granted the licence and shall apply in writing to the said authority, for a duplicate. (2) On receipt of an application along with the appropriate fee as specified in rule 32, the licensing authority shall issue a duplicate licence clearly marked "Duplicate". (3) If after the issue of a duplicate licence, the original is found, the same shall be surrendered forthwith to the licensing authority by which it was issued

27. General conditions to be observed by the holder of a licence.—The holder of a licence granted under rule 24 shall,— (a) maintain on an annual basis, a register in

Form 14 and an alphabetical list of the names of the students admitted during the year; (b) conduct the training course according to the syllabus specified in rule 31 ; 61 (d) issue to every student who has completed the course a certificate in Form 5; (e) submit to the licensing authority which granted the licence such information or return as may be called for by it from time to time for the purposes of this Chapter; (f) not shift the school or establishment from the premises mentioned in the licence without the prior approval in writing of the licensing authority, which granted the licence; (g) keep the premises of the school or establishment and the record and registers maintained by it at all reasonable times open for inspection by the licensing authority or by any person authorised in this behalf by the licensing authority; (h) exhibit in a conspicuous manner on all the motor vehicles used for imparting instructions the name, full address of the school or establishment and the telephone number, if any, in bold letters; 60 Proviso added by G.S.R. 589(E), dated 16-9-2005 (w.e.f. 16-9-2005). 61 Cl. (c) omitted by G.S.R. 933(E), dated 28-10-1989 (w.e.f. 28-10-1989). 23 (i) maintain a record separately for each trainee showing the number of driving hours spent every day in Form 15; (j) display at a prominent place in its office the following:— (i) the licence in original issued to the school or establishment by the licensing authority, and (ii) the names and addresses of instructors employed by the school or establishment; (k) not act in a manner calculated to mislead any person making an application to receive instructions from the school or establishment as to his ability to procure a licence for such person other than in accordance with these rules or to connive with any person in acts of commission or omission with a view to circumventing the provisions of this Chapter

28. Power of the licensing authority to suspend or revoke licence.—(l) If the licensing authority which granted the licence is satisfied, after giving the holder of the licence an opportunity of being heard, that he has— (a) failed to comply with the requirements specified in sub-rule (3) of rule 24; or (b) failed to maintain the vehicles in which instructions are being imparted in good condition; or (c) failed to adhere to the syllabus specified in rule 31 in imparting instruction; or (d) violated any other provision of rule 27, it may, for reasons to be recorded in writing, make an order,— (i) suspending the licence for a specified period; or (ii) revoking the licence. (2) Where the licence is suspended or revoked under sub-rule (1), the licence shall be surrendered to the licensing authority by the holder thereof

29. Appeal.—Any person aggrieved by any order of the licensing authority under sub- rule (5) of rule 24, rule 25 or rule 28 may, within thirty days of the date of receipt of such order, appeal to the Head of the Motor Vehicles Department established under section 213

30. Procedure for appeal.—(l) An appeal under rule 29 shall be preferred in duplicate in the form of a memorandum, setting forth the grounds of objections to the order of the licensing authority and shall be accompanied by a certified copy of the order appealed against and appropriate fee as specified in rule 32. 24 (2) The appellate authority, after giving an opportunity to the parties to be heard and after such further enquiry, if any, as it may deem necessary, pass appropriate orders 62[within a period of forty five days from the date of receipt of such an appeal]

31. Syllabus for imparting instructions in driving of motor vehicles.—(l) The syllabus for imparting instructions in driving of motor vehicles of the schools or establishments shall be as follows (see tables below):— 2. 3. 4. 5. 6. 7. 8. 9

11. Know your vehicle control: Foot controls Hand controls Other controls Pre-driving checks Beginning to drive Driving on the road Driving at inter-sections Maneuvers Reversing Parking Priority for certain vehicles DRIVING THEORY—I Simple introduction to automobile engines and their working. Foot brake, accelerator, clutch-dipper (not in present models). Steering wheel, hand brake, horn, light, wipers, ignition switch, starter, dipper and indicators. Rear-view mirror (right and left side), instrument cluster, gauges, dials, windscreen—their purpose. (i) Before sitting on driver's seat and (ii) After sitting on driver's seat. Precautions just before moving, While moving Bitting point, Moving, Steering control, Changing of gear, Stopping, Braking, Accelerator (gradual, sudden) Traffic sense, road sense, judgment, parking and positioning according to road users, Reversing. Anticipation, judgment and road positioning according to other road users. Mirror Signal and Maneuver (MSM) and Position Speed and Look (PSL). Zone of vision: Merging and diverging maneuvers—turning maneuvers to left, right, about, 3-point turn, 5-poinl turn and U-turn, overtaking stationary vehicle, moving vehicle in left side and right side. Locating reverse gear in sitting position, speed control, steering in reverse gear, weaving the 'S' bend and common errors. Parallel, angular, perpendicular, parking facing uphill, parking facing downhill,

common errors. Emergency vehicles Fire engines, and Ambulance. 62 Inserted by G.S.R. 16-9-2005 (w.e.f. 16-10-2005). 25 1. 2. 3. 4. 5. 6. 7. 8. 9

10. Driving regulations Hand signals Traffic signs B.TRAFFIC EDUCATION—I Road use regulations made under section 1 18 of the Motor Vehicles Act, 1988. Schedule to the Motor Vehicles Act, 1988. Hand signals of Traffic constables/ Traffic warden. Introduction to automatic light signals. Introduction to road markings. Speed regulations on highways and city roads. Parking at objectionable places. Some important provisions of the Motor Vehicles Act, 1988—Sections 122, 123, 125, 126 and 128 of the Motor Vehicles Act, 1988. Test of competence to drive C. LIGHT VEHICLES DRIVING PRACTICE 2. 6. 4. 5. 6. 7. 8. 9. 10. 2. 3

4. Identification of various parts of the vehicles. Pre-driving checks Steering practice Bitting point Moving and gear changing Stopping: Developing judgment and anticipation to drive on road. Reversing Turning about and parking. Licensing. Sub-rule (3) of rule 15 of the Central Motor Vehicles Rules, 1989. (i) Before sitting on driver's seat, and (ii) After sitting on driver's seal. —Push and pull method. —Normal stopping —Emergency stopping. —In straight —in S bends. D. VEHICLE MECHANISM AND REPAIRS Layout of vehicle. Function of diesel and petrol engine. Fuel system Cooling system 26 —Fuel lines —Fuel injection pump —Automiser —Airlock —Oil block. —Purpose —Radiator —Water pump —Fan leaf/fan belt —Radiator water boiling —Rectification. 5. 6. 7. 8. 9. 10. 11

12. Lubrication system Transmission system Suspension system Steering system Brake system Electrical system Tyres —Purpose —Engine lubrication —Chassis lubrication —Oil grade numbers unilwise. (a) Clutch: —Function —Linkages (b) Gearbox: —Function —Purpose —Parts (c) Propeller shaft: —Function / purpose —Yoke joint —C.J. bearing slip —Lubrication (d) Differential: —Purpose —Function/Noise. —Purpose —Springs —Shackle, shackle pinbushes —Shock absorber and its bushes. —Purpose —Steering geometry —Steering linkages —Steering box —Purpose —Hydraulic brake andits know-how —Air assisted hydraulic brake and its know-how —Air brake and its know-how —Brake adjustment of the entire system. —Battery and its condition —Dynamo/Alternator —Self motor—Starter motor regulators —Lights—Knowledge to read the charging rate in the Ampere meter. —Study of tyres —Maintenance —Effect of defective tyres and wheel alignment. Instruments cluster, dash board meters and their purposes and functions. 27 E. MEDIUM AND HEAVY VEHICLE DRIVING: DRIVING THEORY—11 2. 3. 4. 5. 6. 7. 8. 9. IO. 11. 12. 13

14. Qualities of a good driver Knowledge of vehicle controls Response to controls Pre-driving checks Holding steering wheel Gear changing Beginning to drive M.S.M. and P.S.L. Routines. Manoeuvres Slopping Stopping distance Following distance Identification, prediction, decision and execution (IPDE) principle. Defensive driving techniques —Patience, responsibility, self-confidence, anticipation, concentration, courtesy, defensive driving, knowledge of road rules/regulations, knowledge of vehicle controls, maintenance and simple mechanism. —Major controls —Minor controls. —Accelerator —Brake—Gradual /Sudden /Sudden tierce —Clutch —Steering. (i) Before sitting on driver's seat, and (//) after sitting on driver's seat. —Push and pull method practice —on the move —while gear changing —while turning —while sounding horn —while operating dash board switches —while signalling —on emergency. —Double de-clutching, importance and procedure single clutching —Gear up procedure, shifting to lower gears —Gear down procedure, shifting to higher gears. —l gear —11 gear —IV gear —V gear —Reverse gear —Over drive/optional. —Passing —Merging —Diverging —Overtaking —Crossing —Turning —Cornering —Reversing —Parking. —Normal stopping —Emergency stopping —Use of engine brake/ exhaust brake. —Reaction distance —Braking distance. —Meaning —Distance method —Car length method —2seconds time rule method. Judgment Anticipation Escape route. 28 15. 16. 17. 18. 19. 20. 21. 2. 3. 4

5. Night driving Hill driving Emergency manoeuvres Driving under special conditions In wet weather Towing (trailer driving) Fuel saving methods Reports—discussions Location of head light switch Procedure Obligation to light the lamps, restriction on lighting the lamps. Starling in hill using the parking brake method Slipping the clutch method Driving uphill Driving downhill. Prevention is better than cure in case of skidding, horn stuck Fire, wheels coming out Brake failure Broken stub axle Burst of front tyre Steering wobbling Snapping of steering linkages Jamming of accelerator pedal Snapping of clutch rod Under special circumstances like chances of collision with a disabled vehicle. Brake failure

during downhill Sudden obstruction in front of the vehicle In dawn, dusk and misty roads In dense traffic. Procedure On tow board Speed of towing Reversing and positioning the vehicle with trailers. F. TRAFFIC EDUCATION—II Know your road Slight distance Road junctions Traffic islands Bye-pass, subway, over-bridge and flyovers Functional classification Design speeds Road geometries Surface types and characteristics Slopes and elevation. At bends At intersections. Principles and types I junctions Y junctions 4-Arm junctions Staggered junctions Controlled junctions Uncontrolled junctions. Types of round about Channelisers, median. Purpose Driving procedures. 29 G. PUBLIC RELATIONS FOR DRIVERS Some basic aspects about ethical and courteous behaviour with other road users H. HEAVY VEHICLE DRIVING PRACTICE 2. 3. 4. 5. 6. 7. 8. 9. IO. 11. 12. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 2. 3. 4. 5. 6. 7

8. Introduction of various instruments Pre-driving checks Beginning to drive Rural road driving Development of judgment: Development of anticipation: Developing skill to drive in crowded streets. Nigh I driving. Cross country practice and hill driving. Internal-trade test. Reversing and parking practice. Licensing. Dial gauges and controls. (i) Before sitting on driver's seat, and (ii) After sitting on driver's seat. Bitting point, moving, changing gear including double de-clutch steering, stopping, hand signals. Application of IBDE—principle. Passing, overtaking, merging, diverging, M.S.M. and P.S.L. routine method of practice, defensive driving technique, proper following. Turning, meeting, entering and emerging in junctions, lane selection and lane discipline, intersection, observa Hon. l. FIRE HAZARDS Fire-fighting and prevention methods on vehicle. J. VEHICLE MAINTENANCE Factors affecting the vehicle parts due to bad and negligent driving. General day-to-day maintenance and periodical maintenance. Battery maintenance. Tyre maintenance and tube vulcanizing. Engine tune up. Checking wheel alignment. Brake adjustment. Accelerator, brake, clutch-pedal adjustment. Fan belt adjustments. Observation of dash-board meters. Lubrication. Removal of air lock and oil block. K. FIRST-AID Introduction to first-aid. Outline of first-aid. Structure and functions of the body. Dressings and bandages. The circulation of the blood. Wounds and haemorrhage. Haemorrhage from special regions. Shock. 30 9. 10. 11. 12

13. Respiration. Injuries to bones. Burning scales. Unconsciousness (insensibility). Poisons. [(2) The lessons for training drivers of non-transport vehicles shall cover Parts A, B, C, F, G and K of the syllabus referred to in sub-rule (1) and the training period shall not be less than twenty-one days: Provided that in case of motor cycles, it shall be sufficient compliance with the provisions, if portion of Part C of syllabus as applicable to such vehicles are covered. (3) The lessons for training drivers of transport vehicles shall cover Parts E, F, G, H, l, J and K of the syllabus referred to in sub-rule (1) and the training period shall not be less than thirty days: Provided that this sub-rule shall not apply in respect of drivers holding driving licence to drive medium goods vehicle or medium passenger motor vehicle who had undergone the lessons after the commencement of tins rule, and desiring to obtain a driving licence to drive heavy goods vehicle or heavy passenger motor vehicle. (4) The actual driving hours for trainees in driving non-transport vehicles shall not be less than ten hours and actual driving hours for trainees in driving transport vehicles shall not be less than fifteen hours: Provided that in the case of drivers holding driving licence to drive medium goods vehicle or medium passenger motor vehicles undergoing training for heavy motor vehicles, it shall be sufficient if they undergo training in driving for a period of not less than five hours. Nothing in this rule shall apply in the case of an applicant whose driving licence authorises him to drive a motor cycle or a three-wheeler non-transport vehicle or a motor car, applying for a licence to drive a motor cab of the respective type, or in the case of an applicant holding a driving licence to drive a tractor, applying for a licence to drive a tractor-trailer combination.] (6) Where any trainee possesses first-aid certificate issued by St. John Ambulance Association, he need not undergo Part K of the syllabus referred to in sub-rule (1).] 64131 -A. Temporary licence.—(l) Where there is no school or establishment as is referred to in sub-section (4) of section 12 or granted a licence under sub-rule (4) of rule 24, in any Taluk within the jurisdiction of the licensing authority, the licensing authority 63 Substituted by G.S.R. 338(E), dated 26-3-1993 (w.e.f. 26-3-1993). 64 Inserted by G.S.R. 933(E), dated 28-10-1989 (w.e.f. 28-10-1989). 31 may, notwithstanding any tiling contained in sub-rules (3) and (4) of rule 24 or rule 25, grant a temporary licence to any establishment or any person for imparting instructions in the driving of a transport vehicle, subject to the following conditions, namely:— (a) the temporary licence shall be valid for a period of one year from the date of its issue: Provided that as long as the Taluk does not have any school or establishment, the licensing authority may renew a temporary licence granted under this sub-rule for a further period not exceeding one year at a time; (b) the person imparting instructions in the driving of a transport vehicle shall possess the following qualifications, namely:— (i) a minimum driving experience of five years in the class of vehicles in which instructions are proposed to be imparted; (ii) adequate knowledge of the regional language of the region in which the school or establishment is situated; (iii) thorough knowledge of traffic signs specified in the Schedule to the Act and the Regulations made under section 118; (iv) ability to demonstrate and explain the functions of different components and parts of a vehicle; (c) the applicant shall maintain a motor vehicle each of the type in which the instruction is imparted and also the following apparatus, namely:— (i) a blackboard; (ii) traffic sign chart; (iii) a service chart depicting a detailed view of all the components of a motor vehicle; (iv) puncture kit with tyre lever, wheel brace, jack; (v) spanners (a set each of fixed spanners, box spanners, screw driver, screw spanners and hammer). (2) The driving schools run by a State Transport Undertaking or an Industrial Training Institute set up by the Central Government or any State Government and other establishments run by the Central Government or a State Government which have facilities for imparting training for drivers, shall be authorised to issue driving certificates in

Form 5, subject to the condition that the training imparted in these schools shall be in accordance with the syllabus referred to in rule 31 .] 32. Fees.—The fees which shall be charged under the provisions of this Chapter shall be as specified in the Table below:— 32 65[TABLE Serial No. 2. 3. 4. 5. 6. 7. 8. 9. IO

11. Purpose (2) In respect of issue or renewal of learner's licence for each class of vehicle. In respect of issue of a driving licence in Form 6. In respect of issue of International Driving Permit in Form6-A In respect of issue of a d riving licence in Form 7. For test of competence to drive. In respect of addition of another class of vehicle to driving licence in Form 6. In respect of renewal of driving licence in Form 6. In respect of renewal of a driving licence in Form 6 to drive a motor vehicle for which application is made after the grace period In respect of addition of another class of motor vehicle to the driving licence in Amount (3) Thirty rupees Forty rupees Five hundred rupees [Two hundred rupees] including the of cost computerized chip Fifty rupees Thirty rupees [Fifty rupees] [Hundred rupees and an additional fee at the rate of fifty rupees for a period of delay of one year or part thereof reckoned from the date of expiry of the grace period] [Two hundred rupees] including (4) IO Form 7 and renewal of driving licence in Form the cost of computerized chip 7. In respect of issue and renewal of licence to a Two thousand school or establishment for imparting and five hundred instructions in driving. rupees In respect of issue of duplicate licence to the Two thousand and school or establishment imparting instructions five hundred in driving. rupees In respect of an appeal against the orders of One hundred licensin authorit referred to in rule 30. ru ees 18(1 24(2) 26(2) Section (5) 8 9 9] 9 9 11 15 15 11 12 12 65 Substituted by G.S.R. 221 (E), dated 28-3-2001 (w.e.f. 28-3-2001). Earlier the Table was substituted by G.S.R. 76(E), dated 31-1-2000 (w.e.f. 31 -T 2000). Before that the Table was substituted by G.S.R. 684 (E), dated 5-10-1999 (w.e.f. 22-10-1999). 66 Inserted by G.S.R. 720(E), dated 10-9-2003 (w.e.f. 10-10-2003). 67 Substituted by G.S.R 400(E), dated 31-5-2002, for "One hundred and fifty rupees" (w.e.f. 31-5- 2002). 68 Substituted by G.S.R. 400(E), dated 31-5-2002, for "Thirty rupees" (w.e.f. 31 -5-2002), 69 Substituted by G.S.R. 720(E), dated 10-9-2003, for "Thirty rupees" (w.e.f. 10-10-2003). 70 Substituted by G.S.R. 400(E), dated 31-5-2002, for "One hundred and fifty rupees" (w.e.f. 31-5- 2002). 33 CHAPTER 111 REGISTRATION OF MOTOR VEHICLES Trade certificate 33. Condition for exemption from registration.—For the purpose of the proviso to section 39, a motor vehicle in the possession of a dealer shall be exempted from the necessity of registration subject to the condition that he obtains a trade certificate from the registering authority having jurisdiction in the area in which the dealer has his place of business in accordance with the provisions of this Chapter

Form 16 and shall be accompanied by the appropriate fee as specified in rule 81. (2) Separate application shall be made for each of the following classes of vehicles, namely:— (a) motor cycle; (b) invalid carriage; (c) light motor vehicle; (d) medium passenger motor vehicle; (e) medium goods vehicle; if) heavy passenger motor vehicle; (g) heavy goods vehicle; (h) any other motor vehicle of a specified description

35. Grant or renewal of trade) On receipt of an application for the grant or renewal of a trade certificate in respect of a vehicle, the registering authority may, if satisfied that the applicant is a bona fide dealer and requires the certificates specified in the application, issue to the applicant one or more certificates, as the case may be, in

Form 17 71 [within thirty days from the date of receipt of such an application] and shall assign in respect of each certificate a trade registration mark consisting of the registration mark referred to in the notification made under sub-section (6) of section 41 and followed by two letters and a number containing not more than three digits for each vehicle, for example:- AB—Represent State Code. 12—Registration District Code. TCI—Trade certificate number for the vehicle. 71 Inserted by G.S.R. 589(E), dated 16-9-2005 (w.e.f. 16-10-2005). 34 (2) No application for trade certificate shall be refused by the registering authority unless the applicant is given an opportunity of being heard and reasons for such refusal are given in writing

36. Refund.—Where the registering authority refuses to issue or renew a trade certificate, it shall refund to the applicant fifty per cent of the fee paid along with the application

37. Period of validity.—A trade certificate granted or renewed under rule 35 shall be in force for a period of twelve months from the date of issue or renewal thereof and shall be effective throughout India

38. Issue of duplicate certificate.—(l) If at any time the trade certificate is lost or destroyed, its holder shall report to the police station in the jurisdiction of which the loss or destruction has occurred and intimate the fact in writing to the registering authority by whom the certificate was issued and apply in

Form 18 to the said authority for a duplicate certificate accompanied by the appropriate fee as specified in rule 81 . (2) On receipt of an application alongwith the fee, the registering authority may issue a duplicate "Trade Certificate" clearly "marked "Duplicate". (3) If after the issue of a duplicate certificate the original is traced, the same shall be surrendered forthwith to the registering authority by which it was issued

39. Use of trade registration mark and number.—(l) A trade registration mark and number shall not be used upon more than one vehicle at a tune or upon any vehicle other than a vehicle bona fide in the possession of the dealer in the course of his business or on any type of vehicle other than the one for which the trade certificate is issued. (2) The trade certificate shall be carried on a motor vehicle in a weatherproof circular folder and the trade registration mark shall be exhibited in a conspicuous place in the vehicle

40. Restrictions on use of trade certificate or trade registration mark and number.—A trade certificate shall be used only by the person to whom it is issued and such person shall not allow or offer or cause the certificate or the number assigned in connection therewith to be used by any other person: Provided that the provision of this rule shall not apply where the person to whom the certificate is granted, or a person bona fide in his employment and acting under his authority, or any other person bona fide acting on behalf of the holder of a trade certificate is present in the vehicle, or if such vehicle is designed for use by only one 35 person and is being used by a prospective purchaser of that vehicle for the purpose of reasonable test or trial

41. Purposes for which motor vehicle with trade certificate may be used.— The holder of a trade certificate shall not use any vehicle in a public place under that certificate for any purpose other than the following:— (a) for test, by or on behalf of the holder of a trade certificate during the course of, or after completion of, construction or repair; or (b) for proceeding to or returning from a weigh bridge for or after weighment, or to and from any place for its registration; or (c) for a reasonable trial or demonstration by or for the benefit of a prospective purchaser and for proceeding to or returning from the place where such person intends to keep it; or (d) for proceeding to or returning from the premises of the dealer or of the purchaser or of any other dealer for the purpose of delivery; or (e) for proceeding to or returning from a workshop with the objective of fitting a body to the vehicle or painting or for repairs; or if) for proceeding to and returning from airport, railway station, wharf for or after being transported; or (g) for proceeding to or returning from an exhibition of motor vehicles or any place at which the vehicle is to be or has been offered for sale; or (h) for removing the vehicle after it has been taken possession of by or on behalf of the financier due to any default on the part of the other party under the provisions of an agreement of hire-purchase, lease or hypothecation

42. Delivery of vehicle subject to registration.—No holder of a trade certificate shall deliver a motor vehicle to a purchaser without registration, whether temporary or permanent

43. Register of trade certificate.—(l) Every holder of a trade certificate shall maintain a register in Form 19 in duplicate which shall be in a bound book, with pages numbered serially. (2) The particulars referred to in Form 19 except the time of return under column 7, shall be entered in the register before the commencement of each trip by the holder of the trade certificate or his representative and a duplicate copy of Form 19 made prior to the commencement of each trip shall be carried during the trip by the driver of the vehicle 36 and shall be produced on demand by any officer empowered to demand production of documents by or under the Act. (3) The holder of a trade certificate shall, at the end of a trip, fill in column 7 of Form 19 (both original and duplicate), and the register and the duplicate shall be open for inspection by the registering authority

44. Suspension or cancellation of trade certificate.—lf the registering authority has reason to believe that the holder of any trade certificate has not complied with the provisions of rules 39 to 43, it may, after giving the holder an opportunity of being heard, suspend or cancel the trade certificate held by him

45. Appeal.—Any person aggrieved by an order of the registering authority under rule 35 or rule 44 may, within thirty days of the receipt of any such order, appeal to the head of the Motor Vehicles Department established under section 213

46. Procedure for appeal.—(l)The appeal referred to in rule 45 shall be preferred in duplicate in the form of a memorandum, setting forth the grounds of objections to the order of the registering authority and shall be accompanied by appropriate fee as specified in rule 81 and a certified copy of the order appealed against. (2) The appellate authority, after giving an opportunity to the parties to be heard and after such

enquiry, if any, as it deems necessary, pass appropriate orders 72[within the period of thirty days from the date of receipt of such an appeal]

47. Application for registration of motor vehicles.—(l) An application for registration of a motor vehicle shall be made in Form 20 to the registering authority within a period of 73[seven days] from the date of taking delivery of such vehicle, excluding the period of journey and shall be accompanied by— (a) sale certificate in Form 21 ; (b) valid insurance certificate; copy of the proceedings of the State Transport Authority or Transport Commissioner or such other authorities as may be prescribed by the State Government for the purpose of approval of the design in the case of a trailer or a semi-trailer;] (d) original sale certificate from the concerned authorities in Form 21 in the case of ex-army vehicles; 72 Inserted by GSR. 589(E), dated 16-9-2005 (w.e.f. 16-10-2005). 73 Substituted by G.S.R. 933(E), dated 28-10-1989, for "two days" (w.e.f. 28-10-1989). 74 Cl. (c) substituted byG.S.R. 338(E),daled 26-3-1993(w.e.f. 26-3-1993). 37 (e) proof of address by way of any one of the documents referred to in rule 4; (f) temporary registration, if any; (g) road-worthiness certificate in Form 22 from the manufacturers, 75[Form 22-A from the body builders]; custom's clearance certificate in the case of imported vehicles along with the licence and bond, if any: Provided that in the case of imported vehicles other than those imported under the Baggage Rules, 1998, the procedure followed by the registering authority shall be same as those procedure followed for registering of vehicles manufactured in India, and] (z) appropriate fee as specified in rule 81. (2) In respect of vehicles temporarily registered, application under sub-rule (1) shall be made before the temporary registration expires

48. Issue of certificate of registration.—On receipt of an application under rule 47 and after verification of the documents furnished therewith, the registering authority shall, subject to the provisions of section 44, issue to the owner of the motor vehicle a 77 [certificate of registration in

Form 23 or Form 23-A, as may be specified in the Notification issued by the concerned State Government or Union Territory Administration] 72[within the period of thirty days from the receipt of such an application]: 69[Provided that where the certificate of registration pertains to a transport vehicle it shall be handed over to the registered owner only after recording the certificate of fitness in Form 38 78[within the period of thirty days from the date of receipt of such an application].] 49. Registration records to be kept by the registering authority.—Every registering authority shall keep in Form 24 a permanent register of motor vehicles registered by it under section 41 and of motor vehicles of other States for which new registration marks are assigned by it under sub-section (2) of section 47 and shall also enter in such record under the respective registration numbers, all changes made with reference to the provisions of sub-section (10) or sub-section (14) of section 41, sub-section (5) of section 49, sub-section (6) of section 50, sub-sections (1), (2), (3) and (5) of section 51 , 75 Added by G.S.R. 338(E), dated 26-3-1993 (w.e.f. 26-3-1993). 76 Cl. (h) substituted byG.S.R. 83(E), dated 5-2-2003 (w.e.f. 5-2-2003). 77 Substituted by G.S.R. 400(E), dated 31-5-2002, for "certificate of registration in Form 23" (w.e.f. 31-5-2002). 78 Added by G.S.R 589(E), dated 16-9-2005 (w.e.f. 16-9-2005). 38 sub-section (4) of section 52, orders of suspension under section 53 and order of cancellation under sections 54 and 55. 79[50. Form and manner of display of registration marks on the motor vehicles.— 80 On or after commencement of this rule, the registration mark referred to in sub-section (6) of section 41 shall be displayed both at the front and at the rear of all motor vehicles clearly and legibly in the form of security license plate of the following specifications, namely:— (i) the plate shall be a solid unit made of 1.0 mm aluminium conforming to DIN 1745/DlN 1783 or ISO 7591. Border edges and corners of the plate shall be rounded to avoid injuries to the extent of approx. 10 mm and the plates must have an embossed border. The plate shall be suitable for hot stamping and reflective sheet has to be guaranteed for imperishable nature for minimum five years. The fast colouring of legend and border to be done by hot stamping; (ii) the plate should bear the letters "IND" in blue colour on the extreme left centre of the plate. The letter should be one-fourth of the size of letters mentioned in rule 51 and should be buried into the foil or applied by hot stamping and should be integral part of the plate; (iii) each plate shall be protected against counterfeiting by applying chromium-based hologram, applied by hot stamping. Stickers and adhesive labels are not permitted. The plate shall bear a permanent consecutive identification number of minimum seven digits, to be laser branded into the reflective sheeting and hot stamping film shall bear a verification inscription; (iv) apart from the registration marks on the front and rear, the third registration mark in the form of self-destructive type, chromium based hologram sticker shall be affixed on the left-hand top side of the windshield of the vehicle. The registration details such as registration number, registering authority, etc., shall be printed on the sticker. The third registration mark shall be issued by the registering authorities/approved dealers of the license plates manufacturer alongwith the regular registration marks, and thereafter if such sticker is destroyed it shall be issued by the license plate manufacturer or his dealer; 79 Substituted by G.S.R. 338(E), dated 26-3-1993 (w.e.f. 26-3-1993). 80 Sub-R. (1) substituted by G.S.R. 221 (E), dated 28-3-2001 as amended by S.O. 938(E), dated 24-9-2001 , S.O. 499(E), dated 9-5-2002 and S.O. 59(E), dated 21-1-2003 (w.e.f. 1-1-2004). 39 (v) the plate shall be fastened with non-removable/non-reusable snap lock fitting system on rear of the vehicle at the premises of the registering authority; The license plates with all the above specifications and the specified registrations for a vehicle shall be issued by the registering authority or approved the license plates manufacturers or their dealers. The Central Road Research Institute, New Delhi or any of the agency authorized by the Central Government shall approve the license plates manufacturers to the above specification; (vi) the size of the plate for different categories of vehicles shall be as follows:— For two and three-wheelers For Light Motor Vehicles/Passenger cars For medium commercial vehicles, heavy 200 x IOO mm 340x200mm/500x 120 mm 340 mm: commercial vehicles and Trailer/combination Provided that this sub-rule shall apply to already registered vehicles two years from the date of commencement:] 81 [Provided further that the size of the registration plates for agricultural tractors shall be as follows:— Front Rear - 285<45 mm - 200x100 mm]: 82[Provided also that the size of registration plate for power tiller shall be 285x45 mm and shall be exhibited at the front. Further, in case of trailer coupled to power tiller, the size of registration plate shall be 200x100 mm and shall be exhibited on its rear:] 83[Provided also that in case of a motor cycle, the size of 285x45 mm for front registration plate shall also be permitted.] (2) In the case of motor cycles the registration mark in the front shall be displayed parallel to the handle bar or on any part of the vehicle including mudguard facing the front instead of, on a

plate in line with the axis of the vehicle:] Provided that— (a) the registration mark exhibited at the rear of a transport vehicle shall be affixed to the vehicle on the right hand side at a distance not exceeding one metre from the ground as may be reasonably possible having regard to the type of the body of the vehicle; (b) the registration mark shall also be painted on the right and left side on the body of the vehicle in the case of a transport vehicle; (c) the registration mark shall also be painted and exhibited on the partition provided between the driver and the passengers, facing the passengers' seats or, where there is 81 Inserted by G.S.R. 720(E),dated 10-9-2003 (w.e.f. 10-10-2003). 82 Third proviso inserted by G.S.R. 589(E), dated 16-9-2005 (w.e.f. 16-9-2006). 83 Fourth proviso inserted by G.S.R. 589(E), dated 16-9-2005 (w.e.f. 16-9-2005). 40 no such partition, on the front interior of the vehicle near the roof to the left side of the driver's seat facing the passengers' seats in the case of a stage carriage or a contract carriage and in the case of a motor cab or a taxi cab it shall be sufficient if the registration mark is painted on the dash-board; the letters of the registration mark shall be in English and the figures shall be in Arabic numerals and shall be shown:— (A) in the case of transport vehicles in black colour on yellow background; and (B) in other cases, in black colour on white background, the registration mark on the trailer shall be exhibited on the left hand side in black colour on yellow background. In addition, the registration mark on the drawing vehicle shall be exhibited on the trailer also and this shall be done on the right hand side at the rear of the trailer or the last trailer as the case may be, in black colour on retro-reflective type yellow background: Provided that where provisions of this clause have not been complied with in respect of motor vehicle, on or before the commencement of the Central Motor Vehicles (8th Amendment) Rules, 2001 , then the provisions shall be complied with,— (i) in respect of transport vehicle, on or before ISt February, 2002; and (ii) in other cases, on or before 1st July, 2002.] The registration mark shall be exhibited in two lines, the State code and registering authority code forming the first line and the rest forming the second line, one below the other: Provided that the registration mark in the front may be exhibited in one line: Provided further that in models of vehicles having no sufficient provision at the rear to exhibit the registration mark in two lines, it shall be sufficient if in such vehicles registration mark is exhibited hi a single line: Provided further that registration mark on a light motor vehicle may be in the centre with illumination. (4) Every motor vehicle, except motor cab and motor car, manufactured on and from the date of commencement of the Central Motor Vehicles (Amendment) Rules, 1993, shall be provided with sufficient space in the rear for display of registration mark in two lines. (5) In case of agricultural tractors, the registration mark need not be inclined to the 86[vertical plane by more than 45 degrees]. 84 Cl. (d) substituted by G.S.R. 901 (E), dated 13-12-2001 (w.e.f. 13-12-2001). Earlier Cl. (d) was substituted by G.S.R. 221 (E), dated 28-3-2001 (w.e.f. 28-3-2001). 85 Added by G.S.R. 338(E), dated 26-3-1993 (w.e.f. 26-3-1993). 41 (6) The registration mark of the drawing agricultural tractor may not be exhibited on the agricultural trailer or trailers.] 87 [51. Size of letters and numerals of the registration mark.—The dimension of letters and figures of the registration mark and the space between different letters and numerals and letters and edge of the plain surface shall be as follows:— No. 1. 2. 3. 4. 88[5. 6. 7. 89[8. 9

52. Class of vehicle (2) All motor cycles and three-wheeled invalid carriages All motor cycles and three-wheeled invalid carriages Motorcycles with engine capacity less than 70 cc Other motor cycles Three-wheelers of engine capacity not exceeding 500 cc Three-wheelers of engine capacity exceeding 500 cc All other motor vehicles Power tillers Trailers coupled to power tillers Dimensions not less than Height Thickness Space Rear-letters Rear-numeral Front-letters & numerals Front-letters & numerals Rear and front numerals and letters Rear and front numerals and letters Rear and front letters and numerals Front letters and numerals Rear letters and numerals (3) 35 40 15 30 35 40 65 15 30 (4) 7 7 2.5 5 7 7 IO 2.5 5 (5) 5 5 2.5 5 5 5] 10] 2.5 5] Renewal of certificate of registration.—(l) An application by or on behalf of the owner of a motor vehicle, other than a transport veliicle, for the renewal of a certificate of registration, shall be made to the registering authority in whose jurisdiction the veliicle is, in

Form 25 not more than sixty days before the date of its expiry, accompanied by the appropriate fee as specified in rule 81 . (2) On receipt of an application under sub-rule (1), the registering authority shall refer the vehicle to the authority referred to in sub-section (1) of section 56 and after obtaining a certificate of fitness from that authority, renew the certificate of registration: 86 Substituted by G.S.R. 11 1 (E), dated 10-2-2004, for "vertical by more than 30 degrees" (w.e.f. 10-8-2004). 87 Substituted by G.S.R. 338(E), dated 26-3-1993 (w.e.f. 26-3-1993). 88 Substituted by G.S.R. 21 4(E), dated 18-3-1999 (w.e.f. 18-3-1999). 89 Inserted by G.S.R. 589(E), dated 16-9-2005 (w.e.f. 16-9-2005). 42 Provided that in a case where the certificate of fitness is granted on a date after the expiry of a certificate of registration, the renewal shall be made from the date of grant of the certificate of fitness for a period of five years. (3) A motor vehicle other than a transport vehicle shall not be deemed to be validly registered for the purposes of section 39, after the expiry of the period of validity entered in the certificate of registration and no such vehicle shall be used in any public place until its certificate of registration is renewed under sub-rule (2)

53. Issue of duplicate certificate of registration.—(l) if at any time, the certificate of registration is lost or destroyed the owner shall report to the police station in the jurisdiction of which the loss or destruction has occurred and intimate that fact in writing to the registering authority by whom the certificate of registration was issued. (2) An application for the issue of a duplicate certificate of registration shall be made to the 90[last registering authority] in

54. Assignment of new registration mark.—(l) An application for the assignment of a new registration mark under sub-section (1) of section 47 shall be made in

Form 27 and shall be accompanied by a no objection certificate in Form 28 along with the appropriate fee as specified in rule 81 , within a period of thirty days from the date of expiry of the period specified in the said section: Provided that where a motor vehicle is intended to be kept in a State for a period exceeding twelve months and the owner of such vehicle makes a declaration to that effect, the application may be made at any time within the said period of twelve months. (2) On receipt of an application under sub-rule (1 the registering authority shall, subject to the provision of section 44, assign to the vehicle the registration mark

55. Transfer of ownership.—(l) Where the ownership of a motor vehicle is transferred, the transferor shall report the fact of transfer in

Form 29 to the registering authorities concerned in whose jurisdiction the transferor and the transferee reside or have their places of business. (2) An application for the transfer of ownership of a motor vehicle under sub-clause (z) of clause (a) of sub-section (1) of section 50 shall be made by the transferee in Form 30, and shall be accompanied by— (i) the certificate of registration; 90 Substituted by G.S.R. 221 (E), dated 28-3-2001 , for "original registering authority" (w.e.f. 28-3- 2001). Earlier these words were substituted by G.S.R. 76(E), dated 31-1-2000 (w.e.f. 31-1-2000). 43 (ii) the certificate of insurance; and (iii) the appropriate fee as specified in rule 81 . (3) An application for transfer of ownership of a motor veliicle under subclause (ii) of clause (a) of sub-section (1) of section 50 shall be made by the transferee in Fonn 30 and shall, in addition to the documents and fee referred to in sub-rule (2), be accompanied by one of the following documents, namely:— (a) a no objection certificate granted by the registering authority under sub- section (3) of section 48; or (b) an order of the registering authority refusing to grant the no objection certificate under sub-section (3) of section 48; or (c) where the no objection certificate or the order, as the case may be, has not been received, a declaration by the transferor that he has not received any such communication together with— (i) the receipt obtained from the registering authority under subsection (2) of section 48; or (ii) the postal acknowledgement received from the registering authority where the application for no objection certificate has been sent by post

56. Transfer of ownership on death of owner of the) Where the owner of a motor vehicle dies, the person succeeding to the possession of the veliicle may for a period of three months, use the vehicle as if it has been transferred to him where such person has, within thirty days of the death of the owner informs the registering authority of the occurrence of the death of the owner and of his own intention to use the vehicle.(2) The person referred to in sub-rule (1) shall apply in

Form 31 within the period of three months to the said registering authority for the transfer of ownership of the vehicle in his name, accompanied by— (a) the appropriate fee as specified in rule 81 ; (b) the death certificate in relation to the registered owner; (c) the certificate of registration; and (d) the certificate of insurance

57. Transfer of ownership of vehicle purchased in public auction.— (1) The person who has acquired or purchased a motor veliicle at a public auction conducted by or on behalf of the Central Government or a State Government shall make an application in

Form 32 within thirty days of taking possession of the vehicle to the registering authority accompanied by— 44 (a) the appropriate fee as specified in rule 81 ; (b) the certificates of registration and insurance; (c) the certificate or order confirming the sale of the vehicle in his favour duly signed by the person authorised to conduct the auction; and (d) the certified copy of the order of the Central Government or State Government authorising the auction of the vehicle. (2) Where the vehicle auctioned is a vehicle without any registration mark, or with a registration mark which on verification is found to be false, the registering authority shall, subject to the provisions of section 44, assign a new registration mark to the vehicle in the name of the Department of the Central Government or State Government auctioning the vehicle and thereafter record the entries of transfer of ownership of the vehicle giving the name and address of the person to whom the vehicle is sold: 91 [Provided that motor vehicle in the name of the Central Government or State Government shall not be transferred by the concerned registering authority without verifying the proceeding of the auction or disposal of the concerned vehicle.] 58. No objection certificate.—(l) An application for the issue of no objection certificate under section 48 in respect of a motor vehicle shall be made in Form 28 to the registering authority by which the vehicle was previously registered, accompanied by— (a) the certified copy of the certificate of registration; (b) the certified copy of the certificate of insurance; (c) evidence of payment of motor vehicle tax up-to-date; (d) where no tax is payable for a certain period a certificate from the tax collecting authority that no tax is due from the vehicle for the said period. (2) In the case of a transport vehicle, in addition to the documents referred to in sub-rule (1), documentary evidence in respect of the following matters shall also be furnished, namely:— (a) that the vehicle is not covered by any permit issued by any transport authority; (b) that the sum of money agreed upon to be paid by the holder of the permit under sub-sections (5) and (6) of section 86, if any, is not pending recovery; (c) evidence of payment of tax on passengers and goods under any la w for the time being in force upto the date of application for no objection certificate. 91 Inserted by G.S.R. 11 1 dated 10-2-2004 (w.e.f 10-2-2004). 45 (3) On receipt of an application under sub-rule (1), the registering authority shall fill Part Ill of Form 28 and return that part to the applicant duly-signed. (4) Where the registering authority grants or refuses to grant the no objection certificate, it shall return the duplicate copy of the said Form to the applicant and the triplicate copy to the other registering authority after duly filling and signing Part 11 thereof

59. Change in residence.—An application for recording a change in the residence in the certificate of registration of a motor vehicle shall be made by the owner of the vehicle in

Form 33 accompanied by the certificate of registration and proof of address in the manner specified in rule 4 and the appropriate fee as specified in rule 81

60. Endorsement of hire-purchase agreements, etc.—An application for making an entry of hire-purchase, lease or hypothecation agreement in the certificate of registration of a motor vehicle required under sub-section (2) of section 51 shall be made in

Form 34 duly signed by the registered owner of the vehicle and the financier and shall be accompanied by the certificate of registration and the appropriate fee as specified in rule 81

61. Termination of hire-purchase agreements, etc.—(l) An application for making an entry of termination of agreement of hire purchase, lease or hypothecation referred to in sub-section (3) of section 51 shall be made in Form 35 duly signed by the registered owner of the vehicle and the financier, and shall be accompanied by the certificate of registration and the appropriate fee as specified in rule 81 . (2) The application for the issue of a fresh certificate of registration under sub-section (5) of section 51 shall be made in Form 36 and shall be accompanied by a fee as specified in rule 81. (3) Where the registered owner has refused to deliver the certificate of registration to the financier or has absconded then the registering authority shall issue a notice to the registered owner of the vehicle in Form 37. Certificate of fitness 62. Validity of certificate of fitness.—(l) A certificate of fitness in respect of a transport vehicle granted under section 56 shall be in Form 38 and such certificate when granted or renewed shall be valid for the period as indicated below:— (a) new ffansport vehicle 92 * * * (b) renewal of certificate of fitness in respect of vehicles mentioned in {a) above [two years one year 93 [(c) renewal of certificate of fitness in respect of vehicles covered under rule 82 of these rules one year] (d) fresh regisffation of same period as in the case of vehicles imported vehicles manufactured in India having regard to the date of manufacture: 92 Certain words omitted by G.S.R. 933(E), dated 28-10-1989 (w.e.f. 28-10-1989). 93 Substituted by G.S.R. 589(E), dated 16-9-2005 (w.e.f. 16-9-2006). 46 "[Provided that the renewal of a fitness certificate shall be made only after the 95[lnspecting Officer or authorised testing stations as referred to in sub-section (1) of section 56 of the Act] has carried the tests specified in the Table given below, namely:— Item 1 Sparkplug/ Suppressor cap/High Tension cable Head Lamp Beams Other Lights Reflectors Bulbs Rear View Mirror Safety Glass Horn Silencer Dash board equipment Windshield wiper Exhaust emission Braking system Speedometer Steering gear TABLE Check Fitment Check make/type/ Check Check rating, etc. as per conditions functioning 2 Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes No Yes Yes Yes original equipment recommendations 3 Yes No No No Yes No Yes No No No No No No No No 4 Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes No Yes Yes Yes 5 No Yes Yes No No No No Yes Yes Yes Yes No Yes Yes Yes Test 6 No Check No No No No No No No No Yes Yes No Check free play Remarks 7 Beam focus as per Annexure Also ensure that unautho- lights are not fitted rized Ensure colour of reflectors and reflective tapes arc as per rule 104 Ensure that head bulbs wall-age, especially halogen is not higher than those indicated in IS 1606 1993 and also thas halogen bulbs ensure with P45t caps are not used in all vehicles Laminated windscreen glass is used for vehicles manufactured from April, 1996 onwards Ensure no leakage Pollution under Control Certificate As per rule 96(8) As per rule 117 Check free play as per rule 98 for-vehicles with steering wheel. Explanation.—"lnspecting Officer" means an Officer appointed by the State Government under section 213 of the Act.] 94 Proviso added by G.S.R. 221 (E), dated 28-3-2001 (w.e.f. 28-3-2001). Earlier the Proviso was omitted by G.S.R. 76(E), dated 31-1-2000 (w.e.f. 31-1-2000). Before that the Proviso was added b! G.S.R. 684(E), dated 5-10-1999 (w.e.f. 22-10-1999). Substituted by G.S.R. 845(E), dated 27-12-2002, for "Inspecting Officer" (w.e.f. 27-12-2002). 47 (2) The fee for the grant or renewal of a certificate of fitness shall be as specified in rule 81

63. Regulation and control of authorised testing stations.—(l) No operator of an authorised testing station shall issue or renew a certificate of fitness to a transport vehicle under section 56 without a letter of authority in Fonn 39 granted by the registering authority. (2) An application for grant or renewal of a letter of authority under sub-rule (1) shall be made in Fonn 40 to the registering authority having jurisdiction in the area in which the service station or garage is situated and shall be accompanied by,— (a) the appropriate fee as specified in rule 81 ; (b) a security deposit of 96[rupees one lakh] in such manner as may be specified by the State Government. Explanation.—For the purpose of this rule and rules 64 to 72, the registering authority means an officer not below the rank of the regional transport officer of the Motor Vehicles Department established under section 213. (3) A registering authority shall, when considering an application for the grant or renewal of a letter of authority, have regard to the following matters, namely:— (a) the applicant or at least one of the members of the staff employed by him for the inspection of transport vehicles for the purpose of issue or renewal of certificate of fitness possesses the following minimum qualifications:— (i) a 97[three years] diploma in automobile engineering or mechanical engineering or an equivalent qualification; (ii) experience of minimum service of five years in an automobile workshop undertaking repairs of heavy goods vehicles, heavy passenger motor vehicles, medium motor vehicles and light motor vehicles; (iii) a driving licence to drive motor cycle, heavy passenger motor vehicle and heavy goods vehicle with a minimum driving experience of not less than five years; (iv) thorough knowledge of the Act and the rules made thereunder, especially the Chapters relating to registration of motor vehicles and construction, equipment and maintenance of motor vehicles; 96 Substituted by G.S.R. 338(E), dated 26-3-1993, for "rupees ten thousand" (w.e.f. 26-3- 1993). 97 Inserted by G.S.R. 338(E), dated 26-3-1993 (w.e.f. 26-3-1993). 48 (b) the premises where the authorised testing station is to be housed is either owned by the applicant or is taken on lease by him or is hired in his name and it has 98[minimum of one acre of land] for administrative section, reception room and sanitary block and space for erection of testing equipments and other apparatus; (c) inspection lanes are provided adjacent to the building in the same compound or at other places approved by the registering authority; (d) testing equipments and apparatus are installed in such manner that veliicles may pass through with ease and speed; 99(e) the applicant maintains in good condition, the equipment and apparatus for undertaking test pertaining to IOO[exhaust gas, engine tuning, engine analysis], smoke emission, brake system, head-lights, wheel alignments, compressors, speedometers and other like components;] (f) the financial resources of the applicant are sufficient to provide for its continued maintenance; (g) the applicant maintains an up-to-date copy of the Act, these Rules and the concerned State Motor Vehicles Rules. (4) The registering authority shall also, when considering an application under this rule, take into consideration the fact that the setting up of the authorised testing station will improve the availability of testing facilities in the area both in relation to the number of vehicles and proximity to such facilities. (5) The registering authority may, on receipt of an application under sub-rule (2) and after satisfying himself that the applicant has complied with the requirements of sub- rules (3) and (4), grant or renew the letter of authority in

Form 39: Provided that no application for a letter of authority shall be refused by the registering authority unless the applicant is given an opportunity of being heard and reasons for such refusal are given in writing by the registering authority

64. Duration of letter of authority.—A letter of authority granted or renewed shall be effective for a period of five years from the date of grant or renewal

65. General conditions to be observed by the holder of letter of authority.—The holder of a letter of authority shall— 98 Certain words substituted by G.S.R. 338(E), dated 26-3-1993 (w.e.f. 26-3-1993). 99 Cl. (c) substituted by G.S.R. 933(E), dated 28-10-1989 {w.e.f. 28-10-1989). 100 Substituted by G.S.R. 214(E), dated 18-3-1999, for "exhaust gas" (w.e.f. 18-3-1999). 49 (a) maintain a register with a separate page for each vehicle containing the registration number of the vehicle for which the certificate of fitness is granted or renewed, the make and model of the vehicle, the engine number and the chassis number of the vehicle along with the pencil print of the chassis number, the name and address of the owner of the vehicle, particulars of any permit of such vehicle, period of validity of certificate of fitness granted or renewed and the signature of the owner of the vehicle or his authorized representative; (b) forward the particulars of the transport vehicles for which certificates of fitness have been granted or renewed and the period of validity of such certificate, within two days of grant or renewal of the certificate of fitness, to the authority which has granted the permit and where the transport vehicle is not covered by a permit, to the transport authority in whose jurisdiction the vehicle is kept; (c) issue to every transport vehicle satisfying the requirements of section 56, a certificate of fitness in accordance with the provisions of rule 62; (d) not shift the place of business mentioned in the letter of authority without the prior approval in writing of the registering authority which granted the letter of authority; (e) keep the premises of the testing station and the records and registers maintained by it and all the machinery, equipment and apparatus in the premises at all reasonable time open for inspection by the registering authority or any person of the Motor Vehicles Department of the State Government established under section 213 authorised in this behalf by the registering authority; (f) display at a prominent place in its main office the following:— (i) the letter of authority in original issued to the authorised testing station by the registering authority; (ii) the name and address of the person authorised to issue or renew the certificate of fitness; (iii) the qualifications of the persons referred to in clause (a) of sub-rule (3) of rule (g) not charge a fee for inspection of a vehicle for the purpose of issue or renewal of the appropriate certificate of fitness in excess of the fee specified in rule 81 ; (h) surrender to the Regional Transport Authority having jurisdiction over the area, the register referred to in clause (n) as soon as entries in all the pages in the register are completed and in any case not later than two days after such completion. 50

66. Issue of duplicate letter of authority.—(l) If at any time the letter of authority granted or renewed under sub-rule (5) of rule 63 is lost or destroyed, the holder of the letter of authority shall report to the police station in the jurisdiction of which the loss or destruction has occurred and intimate the fact in writing to the registering authority which granted or renewed the letter of authority and shall apply for a duplicate. (2) On receipt of an application alongwith the appropriate fee as specified in rule 81 , the registering authority may issue a duplicate letter of authority clearly marked "Duplicate". (3) If after the issue of a duplicate letter of authority, the original is traced, the same shall be surrendered forthwith to the registering authority by which it was issued

67. Supervision of authorised testing stations.—The registering authority or any officer of the Motor Vehicles Department of the State Government duly authorised in this behalf by the registering authority may, at any time, conduct test checks at the premises of the authorised testing station with a view to ensure that the vehicles are properly tested by the authorised testing station

68. Power of registering authority or Regional Transport Authority to call for information.—The authorised testing station shall submit to the registering authority or the Regional Transport Authority having jurisdiction in the area, such information or returns as may be called for by such authority from time to time

69. Power of registering authority to suspend or cancel the letter of authority or forfeit security deposit.—(l) If the registering authority is satisfied after giving the holder of a letter of authority an opportunity of being heard, that he has— (a) failed to maintain the equipment, machinery and apparatus referred to in sub- clause (e) of sub-rule (3) of rule 63 in good conditioner (b) failed to comply with the

other requirements laid down in sub-rule (3) of rule (c) failed to observe correct standards of testing before granting or renewing certificates of fitness as noticed at the time of test-checking referred to in rule 67 or the frequency of accidents involving transport vehicles covered by certificates of fitness granted or renewed by the authorised testing station attributable to any mechanical defect of the vehicle, it may— (i) suspend the letter of authority for a specified period; or (ii) cancel the letter of authority; or 51 (iii) order forfeiture of the security deposit furnished by the authorised testing station. (2) Where the letter of authority is suspended or cancelled under sub-ru le (1), the holder of the letter of authority shall surrender the same to the registering authority forthwith. (3) Where the security deposit is forfeited under sub-rule (1), the holder of the letter within thirty days of the receipt of the order of forfeiture, remit to the registering authority the amount ordered to be forfeited so that the requirement of sub-rule (2) of rule 63 in relation to deposit of security is complied with

70. Appeal.—Any person aggrieved by an order of the registering authority under sub- rule (5) of-rule 63 ov sub-rule (1) of rule 69, may, within thirty days of the receipt of the order, appeal to the Head of the Motor Vehicles Department of the State Government established under section 213

71. Procedure for appeal.—(l) An appeal under rule 70 shall be preferred in duplicate in the form of a memorandum, setting forth the grounds of objections to the order of the registering authority and shall be accompanied by the appropriate fee as specified in rule 81 and a certified copy of such order. (2) The appellate authority may, after giving an opportunity to the parties to be heard and after such enquiry as it may deem necessary, pass appropriate orders

72. Voluntary surrender of letter of authority.—(l) The holder of a letter of authority may, at any time, surrender the letter of authority issued to him, to the registering authority which has granted the letter of authority and on such surrender, the registering authority shall cancel the letter of authority forthwith. (2) On cancellation of the letter of authority under sub-rule (1), the registering authority shall refund to the holder of the letter of authority, the amount of security deposit referred to in sub-rule (2) of rule 63 in full and without any interest

73. Tax clearance certificate to be submitted to the testing station.—No authorised testing station shall accept an application for the grant or renewal of a certificate of fitness unless the same is accompanied by a tax clearance certificate in such form as may be specified by the State Government, from the Regional Transport Officer or motor vehicle inspector having jurisdiction in the area to the effect that the vehicle is not in arrears of motor vehicle tax or any compounding fee referred to in sub-sections (5) and (6) of section 86. Registration of vehicles belonging to the Central Government 52 used for defence purposes 74. Assignment of registration marks to the vehicles belonging to the Central Government used for defence purposes.—The authority referred to in sub-section (1) of section 60 shall assign registration marks to the vehicles belonging to the Central Government and used for defence purposes in the following manner, namely:— A group of figures followed by a single capital letter, a broad arrow, not more than six figures and a capital letter or a group of letters. The registration mark shall be in English letters and Arabic numerals. State Register of Motor Vehicles 75. State register of motor vehicles.—(l) Each State Government shall maintain a State register of motor vehicles in respect of motor vehicles registered in the State in

Form 41. (2) Each IOI[State Government shall, if so desired by the Central Government] send to the Director (Transport Research), Ministry of Surface Transport, New Delhi, a printed copy of the register referred to in sub-rule (1). Special provision for registration of motor vehicles of diplomatic officers, etc

76. Registration of vehicles of diplomatic and consular officers.—(l) Every application for registration of a motor vehicle under sub-section (1) of section 42 by or on behalf of any diplomatic officer or consular officer shall be made in triplicate by the head of the mission or consular officer in

Form 42 and be addressed to the registering authority through the Competent Authority accompanied by the relevant documents and fees referred to in rule 47. (2) The Competent Authority shall forward one copy of the application to the registering authority concerned together with a statement certifying the status of the person applying for registration and shall return one copy of the application to the applicant. The third copy of the application may be retained by the Competent Authority for record. (3) The registering authority shall, on receipt of the application duly endorsed under sub- rule (2), register the vehicle, subject to the provision of section 44. (4) The registering authority shall issue to the owner of a motor vehicle registered by it under sub-rule (3), a certificate of registration in Form 43 and shall enter in a register to be kept by it, particulars of such certificate. 101 Substituted by G.S.R. 221 (E), dated 28-3-2001 (w.e.f. 28-3-2001). Earlier these words were omitted by G.S.R. 76(E), dated 31-1-2000 (w.e.f. 31-1-2000). Before that these words were inserted by G.S.R. 684(E), dated 5-10-1999 (w.e.f. 22-10-1999). 53 (5) The registering authority shall assign to the motor vehicle for display thereon in the manner specified in rule 77, the registration mark in accordance with sub-rule (6) or sub- rule (7), as the case may be. A motor vehicle belonging to a diplomatic mission in Delhi or to any of its diplomatic officer shall be assigned a registration mark consisting of the letters "CD" preceded by the number allotted to the mission by the Ministry of External Affairs of the Government of India and followed by a number allotted to the vehicle by the registering authority in the following manner, namely:— (i) an official vehicle meant for the use of the head of a mission shall be allotted the number "1 ' (ii) personal vehicles of the head of the mission shall be allotted the number "1 ", followed consecutively, in alphabetical order, by a letter beginning with the letter "A"; (iii) official vehicles, other than those referred to in clause (i), shall be allotted consecutive numbers beginning with the number "2"; (iv) vehicles belonging to other officers of the mission shall be allotted numbers in consecutive order after the last number allotted under clause (iii); (v) vehicles acquired by a mission or by its diplomatic officer other than heads of missions, shall be allotted numbers in consecutive order after the last number allotted under clause (iv) irrespective of whether such vehicle is for official or personal use of the mission or any of its officers; (vi) a number allotted to a vehicle under any of the clauses (i) to (iv), which is lying unutilised due to sale or export of such vehicle or cancellation of its number may be allotted to another vehicle under the same clause in respect of which an application has been made under sub-rule (1 103[headed by a Carrier Counsellor (7).A motor vehicle belonging to a consular post Officer] or to any of its officers shall be assigned a registration mark consisting of the letters "CC" preceded by the number of the post allotted to it by the Ministry of External Affairs of the Government of India and followed by a number allotted to the vehicle by the registering authority out of a block of numbers allotted for that post in the following manner, namely:— (i) an official vehicle meant for the use of the head of a consular post shall be allotted the first number from the block of numbers allotted to that post; 102 Sub-R. (6) substituted by G.S.R. 221 (E), dated 28-3-2001 (w.e.f. 28-3-2001 103 Substituted by G.S.R. 221 (E), dated 28-3-2001 , for "outside Delhi" (w.e.f. 28-3-2001). 54 (ii) personal vehicles of the Consul-General shall be allotted the number referred to in clause (l), followed consecutively in alphabetical order, by a letter beginning with the letter (iii) official vehicles other than those referred to in clause (l'), shall be allotted consecutive numbers beginning with the second number from the block of numbers allotted to the post; (iv) vehicles belonging to other officers of the post shall be allotted numbers in consecutive order after the last number allotted under clause (Hi); (v) vehicles acquired by a post, or by its consular officers, other than the head of the post shall be allotted numbers in consecutive order after the last number allotted under clause (iv) irrespective of whether such vehicle is for official or personal use of the post or any of its officers; (vi) a number allotted to a vehicle under any of the clauses (i) to (iv) which is lying unutilised due to sale or export of such vehicle or cancellation of its number, may be allotted to another vehicle under the same clause in respect of which an application has been made under sub-rule (i). the purposes of this rule and rules 77, 78 and 79, "competent authority" means:— (i) in relation to a diplomatic officer or a consular officer who has his residence in Delhi, the Chief of Protocol to the Government of India in the Ministry of External Affairs; and (ii) in relation to a diplomatic officer or a consular officer who has his residence at any other place, the Secretary (Transport) to the State Government.] (8) Consular posts headed by Honorary Consular Officers shall use standard size number plates bearing ordinary registration number provided by the concerned registration authorities. They may, however, use the word "name of the country followed by CC (Honorary)" in the same font and colour (i.e., the numbers and letters in white colour on black background) but in letters smaller than the

registration number on a maximum of two of their vehicles. 105[76-A. Application of rules 76 to 80 to organisations notified under the United Nations (Privileges and Immunities) Act, 1947.—The provisions of rules 76 and 77 to 80 shall apply to the motor vehicles of diplomatic officers of the organisations notified 1 04 Substituted by G.S.R. 129(E), dated 16-2-2000 (w.e.f. 16-2-2000). 105 Inserted by G.S.R. 221 (E), dated 28-3-2001 (w.e.f. 28-3-2001)

1. Inserted by G.S.R. 644, dated 25-9-1995. 55 under the United Nations (Privileges and Immunities) Act, 1947 (46 of 1947) as they apply to a diplomatic officer or consular officer with the modification that in rule 76,— (a) in sub-rule (6), for the letters "CD", the letters "UN" shall be substituted; and (b) in sub-rule (7), for the letters "CC", the letters "UN" shall be substituted.] 106[76-B. Registration of vehicles of home-based non-diplomatic officials of diplomatic missions or consular posts.—(l) A motor vehicle belonging to a non- diplomatic official of a diplomatic mission or a consular post in Delhi shall be assigned a registration mark consisting of letters 'CDP' preceded by the number allotted to the mission or post by the Ministry of External Affairs of the Government of India and followed by a number allotted to the vehicle by the registering authority. (2) A motor vehicle belonging to a home-based non-diplomatic official of a consular post outside Delhi shall be assigned a registration mark consisting of the letters 'CCP' preceded by the number of the post allotted to it by the Ministry of External Affairs of the Government of India and followed by the number allotted to the vehicle by the registering authority.] 77. Exhibition of registration) The registration mark assigned under sub- rules (5) to (7) of rule 76 shall be clearly exhibited in reflecting colour both at the front and rear of the vehicle on the plain surface of a plate or part of the veliicle and the size of which shall be 41 centimetres by 14 centimetres— (i) with deep blue background, the registration mark and the number being in white in the case of motor vehicles referred to in sub-rule (6) of rule 76; (ii) with yellow background, the registration mark and the number being in black, in the case of motor vehicles referred to in sub-rule (7) of rule 76; 107 (iii) with light green background, the registration mark and the number being in white in case of motor vehicles referred to in rule 76-B.] (2) The registration mark shall be in English letters and Arabic numerals and— (i) save in the case of a motor cycle or an invalid carriage, the letters shall be not less than 6 centimetres high and 2 centimetres thick at any part, the numerals shall be not less than 9 centimetres high and 2 centimetres thick at any part, and there shall be a space between any letter and any numeral and between any letter or any numeral and 106 Inserted by G.S.R. 395(E), dated 16-7-1997 (w.e.f. 16-7-1997). 107 displayed on a plate in line with the axis of the vehicle and shall, in such a case, be displayed on both sides of the plate. 56 the edge of the plain surface of not less than 1 centimetre and a space between any two letters and between any two numerals of not less than 1 centimetre; and (ii) in the case of a motor cycle or an invalid carriage, the dimensions of the letters and figures shall not be less than two-thirds of those specified in clause (i). (3) The plain surface referred to in sub-rule (2) shall not be inclined from the vertical by more than thirty degrees. The letters and numerals shall be exhibited as follows:— (i) in the case of a transport vehicle, the registration mark shall be exhibited in two separate horizontal lines, the number allotted to the mission or post and the letters

forming the first line followed by the number allotted by the registering authority in the second line; and (ii) in all other cases, the registration mark may exhibit the letters and numerals either in two horizontal lines as aforesaid or in one horizontal line. (4) Notwithstanding anything contained in sub-rule (1), the registration mark exhibited at the front of a motor cycle or an invalid carriage may be (5) In the case of a trailer— (i) the registration mark shall be exhibited on a plate or surface on the left hand side of the trailer, the dimensions of the letters and figures being not less than two-thirds of the dimensions specified in sub-rule (2); (ii) the registration mark of the drawing motor vehicle to be affixed to the rear of the trailer shall be in confonnity with the provisions of these rules relating to the registration mark affixed to the rear of the motor vehicle. (6) The registration mark shall also be painted on the right and left side of the body of a transport vehicle

78. Assignment of new registration mark on removal of vehicle to another State.— (1) Every application for assignment of new registration mark on removal to another State under sub-section (1) of section 47 by or on behalf of a diplomatic officer or consular officer shall be made in triplicate in Fonn 44 and shall be addressed to the registering authority through the competent authority accompanied by the relevant documents and fees referred to in rule 54. (2) The provisions of sub-rules (2) to (7) of rule 76 shall apply to an application made under sub-rule (1) as they apply to an application made under sub-rule (1) of rule 76

79. Suspension and cancellation of registration of vehicle registered under rule 76.—lf, under the provisions of section 53, section 54 or section 55, the registration of a motor vehicle made in accordance with rule 76 is suspended or cancelled, then a copy 57 of the order of suspension or cancellation shall be sent to the competent authority in addition to each of the authorities or persons to whom a copy has to be sent under the said sections

80. Transfer or disposal of motor vehicle registered under rule 76.—(1) Where a motor vehicle registered in accordance with rule 76 is transferred by way of sale or otherwise, the transferor shall, within fourteen days, report the fact of the transfer along with the full name and address of the person to whom the vehicle is transferred to the registering authority within whose jurisdiction the transfer is effected and shall simultaneously send copies of the said report to:— (a) the transferee; (b) the competent authority; (c) the Collector of Customs of the port of importation of the vehicle and where it is not possible to locate the port of importation, to the Collector of Central Excise and Customs nearest to the headquarters of the transferee; and (d) the original registering authority in whose records the registration of the vehicle is recorded, if the transfer is effected in the jurisdiction of another registering authority, and shall also surrender the number plate in respect of the vehicle to the registering authority in whose records the registration of the vehicle is recorded, when the transfer is to a person other than a diplomatic officer or a consular officer. (2) Where the transferee is a diplomatic officer or a consular officer, an application by him or on his behalf shall be made to the registering authority for registration of the vehicle in accordance with the provision of rule 76. 58 81 . Fees.—The fee which shall be charged under the provisions of this Chapter shall be as specified in the table below: 4[TABLE Sl. No. Purpose (2) Amount (3) Fifty rupees Fifty rupees Two hundred rupees Thirty rupees Thirty rupees One hundred rupees One hundred rupeus Twenty rupees Sixty rupees Two hundred rupees Three hundred rupees Four hundred rupees Four hundred rupees Six hundred rupees Six hundred rupees Eight hundred rupees Two hundred rupees Three hundred rupees Half of the fee mentioned in Serial No. 4 Half of the fee mentioned in Serial No. 4 Twenty rupees Fifty rupees One hundred rupees One hundred rupees One hundred rupees Two hundred rupees Three hundred rupee's Four hundred rupees (4) Section (5) 1. 2. 3

4. Grant or renewal of Irade certificate in respect of each vehicle: Motorcycle Invalid carriage Others Duplicate trade certificate: Motorcycle Invalid carriage Others Appeal under rule 46 Issue, renewal of certificates of registration and assignment of new registration mark: 5.6. 7. 8

9. Invalid carriage Motorcycle Light motor vehicle: (i) Non-Transport (ii') Light Commercial Vehicle Medium goods vehicle Medium passenger motor vehicle Heavy goods vehicle Heavy passenger motor vehicle Imported motor vehicle Imported motor cycle Any other vehicle not mentioned above Issue of duplicate certificate of registration Transfer of ownership Change of residence Recording alteration in the certificate of registration Endorsing hire-purchase/lease/ hypothecation agreement 10. Cancellation of hire-purchase/lease/hypothecation agreement or issue of

fresh certificate of registration 11. Conducting test of a vehicle lor grant and renewal of certificate of fitness: (i) Two/three-wheeled vehicle (ii) Light motor vehicle (iii) Medium motor vehicle (iv) Heavy motor vehicle 59 47(1), 52(1), 54(1), 76(1) and 78(1) 55(3), 59 52(4) 60 61(1) and (2) 62(2)

12. Grant or renewal of certificate of fitness for motor vehicle 13. Grant or renewal of letter of authority 14. Issue of duplicate letter of authority 15. Appeal under rule 70 One hundred rupees Five thousand rupees Five thousand rupees Four hundred rupees 62(2) 66(2) Note.—For the removal of doubts, it is hereby declared that medium passenger motor vehicle, heavy goods vehicle, imported motor vehicle and any other vehicle not mentioned in Serial No. 4 of this Table include both transport and non-transport vehicles:] 108[Provided that in case for any purpose referred to in Serial Numbers 4,5,6,7,8,9 and 10 oi this Table is issued on any Smart Card, an additional amount of fee of Rupees Two hundred shall be charged for each such card.] CHAPTER CONTROL OF TRANSPORT VEHICLES Tourist permits 82. Tourist permits.—(l) An application for the grant of permit in respect of a tourist vehicle (hereinafter referred to in these rules as a tourist permit) shall be made in

Form 45 to the State Transport Authority. 109 (2) A tourist permit shall be deemed to be invalid from the date on which the motor vehicle covered by the permit completes 9 years in the case of a motor cab and 8 years where the motor vehicle is other than a motor cab, unless the motor vehicle is replaced;] 111 [(b)] Where a vehicle covered by a tourist pennit is proposed to be replaced by another, the latter vehicle shall not be more than two years old on the date of such replacement. Explanation.—For the purposes of this sub-rule, the period of 112[9 years or 8 years] shall be computed from the date of initial registration of the motor vehicle

83. Authorization fee.—(l) An application for the grant of authorisation for a tourist permit shall be made in

Form 46 and shall be accompanied by a fee of Rs. 500 per annum in the form of a bank draft. 108 Inserted by G.S.R. 400(E), dated 31-5-2002 (w.e.f. 31-5-2002). 109 Cl. (a) of sub-R. (2) omitted by G.S.R. 338(E), dated 26-3-1993 (w.e.f 26-3-1993). 110 Cl. (b) ot sub-R. (2) renumbered as Cl. (a) and Cl. (n) as so renumbered substituted by G.S.R. 26-3-1993 (w.e.f. 26-3-1993). 111 Cl. (c) of sub-R. (2) renumbered as Cl. (b) by G.S.R. 338(E), dated 26-3-1993 (w.e.f. 26-3- 1993). 112 Substituted by G.S.R. 338(E), dated 26-3-1993, for "2 years, 5 years or 7 years" (w.e.f 26-3- 1993). 60 Every authorization shall be granted in Form 23-A, in case the certificate of registration is issued on Smart Card or shall be granted in Form 47, in case the authorization is in paper document mode subject to the payment of taxes or fees, if any, levied by the concerned State. The authority which grants the authorization shall issue to the permit holder separate receipts for such taxes or fees in respect of each bank draft and such receipts shall be security printed watermark paper carrying such hologram as may be specified by the concerned State/Union Territory: Provided that the bank drafts received in respect of taxes or fees shall invariably be forwarded by the authority which grants the authorisation to the respective States: Provided also that the use of such security printed watermark paper carrying such hologram shall come into force on or before six months from the date of commencement of the Central Motor Vehicles (Third Amendment) Rules, 2002.] The authority which grants the authorisation shall inform the State Transport Authorities concerned the registration number of the motor vehicle, the name and address of the permit holder and the period for which the said authorisation is valid:] 115[Provided that where the permit holder undertakes to pay the tax direct to the concerned State Transport Authority at the time of entry in his jurisdiction, the authorisation shall expressly state that it has been issued subject to payment of taxes to the concerned State Transport Authority.] (3) The period of validity of an authorisation shall not exceed one year at atime 84. Right of operation.—No tourist permit shall be deemed to confer the right of operation in any State not included in the authorisation referred to in rule 83 nor shall it exempt the owner of a vehicle from the payment of tax or fee, if any, leviable in any State

85. Additional conditions of tourist permit.—The following shall be the additional conditions of every tourist permit granted to a tourist vehicle other than a motor cab under sub-section (9) of section 88, namely:— 113 Sub-R. (2) substituted by G.S.R. 400(E), dated 31-5-2002 (w.e.f. 31-5-2002). 1 14 Inserted by G.S.R. 338(E), dated 26-3-1993 (w.e.f. 26-3-1993). 115 Inserted by G.S.R. 76(E), dated 31-1-2000 (w.e.f. 31-1-2000). Earlier Proviso was omitted by G.S.R. 684(E), dated 5-10-1999 (w.e.f. 22-10-1999). 116 The words "and shall expire on the 31 st day of March of the year" omitted by G.S.R. 933(E), dated 28-10-1989 (w.e.f. 28-10-1989). 61 (1) The permit holder shall cause to be prepared in respect of each trip a list in triplicate of tourist passengers to be carried in the vehicle, *] giving full particulars as under:— (a) name of the passengers, (b) address of the passengers, (c) age of the passengers, (d) starting point and the point of destination. One copy of the list referred to in sub-rule (1) shall be carried in the tourist vehicle and shall be produced on demand by the officers authorised to demand production of documents by or under the provisions of the Act and the Rules, and the second copy shall be preserved by the permit holder.] (3) The tourist vehicle shall either commence its journey, or end its journey, circular or otherwise, in the home State, subject to the condition that the vehicle shall not remain 119[three months]. The permit holder outside the home State for a period of more than shall see that every return of the tourist vehicle to the home State is reported to the authority which issued the permit: Provided that where the contracted journey ends outside the home State, the vehicle shall not be offered for hire within that State or from that State to any other State except for the return journey to any point in the home State. (4) The tourist vehicle may operate circular tours of places lying exclusively in the home State or in the home State and outside the State if such circular tours are in the list approved by the tourist department of the home State to visit places of tourist, historical or religious importance and the tour is duly advertised before hand. (5) The permit holder or his authorised agent shall issue a receipt to the hirer and the counterfoil of the same shall be kept available with him and produced on demand to the officers empowered to demand documents by or under the Act. (6) The tourist vehicle shall not be parked on any bus stand used by stage carriage and shall not operate from such bus stand. (7) The tourist vehicle shall be painted in white colour with a blue ribbon of five centimetres width at the centre of the exterior of the body and the word "Tourist" shall be inserted on two sides of the vehicle within a circle of sixty centimetres diameter. 117 Certain words omitted by G.S.R. 338(E), dated 26-3-1993 (w.e.f. 26-3-1993). 118 Sub-R. (2) substituted by G.S.R. 338(E), dated 26-3-1993 (w.e.f. 26-3-1993). 119 Substituted by G.S.R. 338(E), dated 26-3-1993, for "two months" (w.e.f. 26-3-1993). 62 (8) The permit holder shall display in the front top of the tourist vehicle a board in yellow with letters in black with the inscription "Tourist permit valid in the State(s) of....."in English and Hindi and also, if he so prefers, in regional language of the home State. (9) The permit holder shall not operate the tourist vehicle as a stage carriage. (10) The permit holder shall maintain a day-to-day logbook indicating the name and address of the permit holder and the registration mark of the vehicle, name and address of the driver with the particulars of his driving licence and the starting and destination points of the journey with the time of departure and arrival and the name and address of the hirer. (11) The permit holder shall furnish once in every 3 months the information contained in condition (10) to the State Transport Authority which granted the permit and the logbook shall be preserved for a period of 3 years and shall be made available to the said authority on demand along with the records referred to in conditions (2) and (4). Explanation.—ln this rule, "home State" means the State which has granted the permit under sub-section (9) of section 88. 85-A. The following shall be the additional conditions of every tourist permit in respect of motor cabs.—(l) The words "Tourist vehicle" shall be painted on both the sides of the vehicle within a circle of twenty-five centimetres diameter. (2) A board with the inscription "Tourist permit valid in the State(s) of .... "in black letters in yellow background shall be displayed in the front of the vehicle above the registration number plates: 120[Provided that this rule shall not apply to motor cabs covered under the 'Rent a Cab' Scheme, 1989.] National permits 86. Application for national permit.—An application for the grant of a national permit shall be made in

87. Form, contents and duration of authorisation.—(l) An application for the grant of an authorisation for a national permit shall be made in

Form 46 and shall be accompanied by a fee of Rs. 500 per annum in the form of a bank draft. 121 [(2) Every authorization shall be granted in Form 23-A, in case the certificate of registration is issued on Smart Card or shall be granted in Form 47, in case the 120 Added by G.S.R. 338(E), dated 26-3-1993 (w.e.f. 26-3-1993). 121 Sub-R. (2) substituted by G.S.R. 400(E), dated 31-5-2002 (w.e.f. 31 -5-20U2). 63 authorization is in paper document mode, subject to the payment of taxes or fees, if any, levied by the concerned State. The authority which grants the authorization shall issue to the permit holder separate receipts for such taxes or fees in respect of each bank draft and such receipts shall be security printed watermark paper carrying such hologram as may be specified by the concerned State/Union territory: Provided that the bank drafts received in respect of taxes or fees shall invariably be forwarded by the authority who grants the authorisation to the respective States: Provided also that the use of such security printed watermark paper carrying such hologram shall come into force on or before six months from the date of the Central Motor Vehicles (Third Amendment) Rules, 2002.] The authority which grants the authorisation shall inform the State Transport Authorities concerned the registration number of the motor vehicle, the name and address of the permit holder and the period for which the said authorisation is valid.] 123 (3) The period of validity of an authorisation shall not exceed one year at atime [124[88. Age of motor vehicle for the purpose of national permit.—(l) No national permit shall be granted in respect of a goods carriage, other than multiaxle vehicle, which is more than -[twelve years] old at any point of time. (2) No national pennit shall be granted for a multiaxle goods carriage which is more than fifteen years old at any point of time. (3) A national permit shall be deemed to be invalid from the date on which a goods carriage covered by the permit completes fifteen years in case of a multiaxle goods carriage and -[twelve years] where the vehicle is other than a multiaxle goods carriage, unless such goods carriage is replaced. Explanation.—For the purpose of this rule, the period of 125[twelve years] or fifteen years, as the case may be, shall be computed from the date of initial registration of the motor vehicle covered under its pennit or the prime mover in case of an articulated vehicle.] No national pennit shall be granted in respect of a multi-axle trailer approved to carry a gross vehicle weight of more than 50 tonnes, which is more than 25 years old at 122 Inserted by G.S.R. 799(E), dated 30-12-1993 (w.e.f. 30-12-1993). 123 Tine words "and shall expire on the 31 st day of March of the year" omitted by G.S.R. 933(E), dated 28-10-1989 (w.e.f. 28-10-1989). 124 R. 88 substituted by G.S.R. 338(E), dated 26-3-1993 (w.e.f. 26-3-1993). 125 Substituted by G.S.R. 799(E), dated 30-12-1993, for "nine years" (w.e.f. 30-12-1993). 126 Inserted by G.S.R. 221 (E), dated 28-3-2001 (w.e.f. 28-3-2001 64 any point of time, the period of 25 years being computed from the date of initial registration of the said trailer. Explanation.—For the purpose of this rule, "multi-axle trailer" means a trailer having more than two axles.] 127 [(5) A national permit shall be in such security printed watermark paper and shall carry such hologram as the State Government or the State Transport Authority, as the case may be, issuing such permit, may specify: Provided that the use of such security printed watennark paper carrying such hologram shall come into force on or before six months from the date of commencement of the Central Motor Vehicles (Third Amendment) Rules, 2002.] 128 * * •k" 90. Additional conditions for national permit.—The national permit issued under sub- section (12) of section 88 shall be subject to the following additional conditions, namely:— (1) The vehicle plying under a national permit shall be painted in dry leaf brown colour with thirty centimetres broad white borders and the words "National permit" shall be inscribed on both sides of the vehicle in bold letters within a circle of sixty centimetres diameter: Provided that the body of a tanker carrying dangerous or hazardous goods shall be painted in white colour with a dry leaf brown ribbon of 5 centimetres width around in the middle at the exterior and that of the driver's cabin in orange colour. (2) A board with the inscription "National permit" valid in the State(s) of . letters on white background shall be carried in front top of such vehicle. . with blue (3) No such vehicle shall carry any goods without a bill of lading in Form 50. (4) The vehicle shall have a minimum of two drivers and shall be provided with a seat across its full width behind the driver's seat providing facility for the spare driver to stretch himself and sleep: 129[Provided that this sub-rule shall apply to light motor vehicle and medium goods vehicles only from a date to be notified by the Central Government.] 127 Inserted by G.S.R. 400(E), dated 31-5-2002 (w.e.f. 31-5-2002). 128 R 89 omitted by G.S.R. 221 (E), dated 28-3-2001 (w.e.f. 28-3-2001). Earlier R. 89 was inserted by G.S.R. 76(E), dated 31-1-2000 (w.e.f. 31-1-2000). Before that R. 89 was omitted by G.S.R. 684(E), dated 5-10-1999 (w.e.f. 22-10-1999). 129 Inserted by G.S.R. 338(E), dated 26-3-1993 (w.e.f. 26-3-1993). 65 (5) The vehicle shall at all times carry the following documents and shall be produced on demand by an officer

empowered to demand documents by or under the Act, namely:— (i) Certificate of fitness, (ii) Certificate of insurance, (iii) Certificate of registration, (iv) National permit, (v) Taxation certificate, (vi) Authorisation. (6) The vehicle shall be subject to all local rules or restrictions imposed by a State Government. (7) The vehicle shall not pick up or set down goods between two points situated in the same State 130[other than the home State]

CHAPTER V CONSTRUCTION, EQUIPMENT AND MAINTENANCE OF MOTOR VEHICLES Preliminary 91 . Definitions.—ln this Chapter, unless the context otherwise requires,— (a) "class label", in relation to any dangerous or hazardous goods, means the class label specified in column 3 of the Table to rule 137; (b) "consignor", in relation to dangerous or hazardous goods intended for transportation by a goods carriage, means the owner of such dangerous or hazardous goods; (c) "dangerous or hazardous goods", means the goods of dangerous or hazardous nature to human life specified in Tables l, 11, and Ill to rule 137; (d) "emergency information panel", means the panel specified in rule 134; (e) "primary risk", in relation to any dangerous or hazardous goods, means the most potent risk which such goods give rise to; (f) "subsidiary risk", in relation to any dangerous or hazardous goods, means the subsidiary risk which such goods are likely to give rise to in addition to the primary risk

92. General.—(l) No person shall use or cause or allow to be used in any public place any motor vehicle which does not comply with the provisions of this Chapter: 130 Inserted by G.S.R. 933(E), dated 28-10-1989 (w.e.f. 28-10-1989). 66 131 [Provided that nothing contained in this rule shall apply to vehicles manufactured prior to the coming into force of the Central Motor Vehicles (Amendment) Rules, 1993.] (2) Nothing in this rule shall apply to a motor vehicle— (a) which has been damaged in an accident or to a vehicle stopped or impeded owing to shortage of fuel or other temporary defects while at the place at which the accident or defect occurred; (b) which is defective or damaged and is being removed to the nearest place of repair or disposal; or (c) which is more than fifty years old from the date of its registration and is being driven for taking part in a vintage car rally: Provided that where a motor vehicle can no longer remain under the effective control of the person driving, the same shall not be used in a public place except by towing. 132[Explanation.—For the purposes of this rule, "motor vehicle" includes construction equipment vehicle.] Testing of components conforming to standards in lieu of Indian Standards: Whenever a part, component or assembly is used in a vehicle complying with standards in lieu of those notified in these rules such as an international standard (for example, EEC/ECE/IEC/ISO or such other standards) or a foreign national standard, permission for use of such parts, component or assembly complying with such standards shall be approved by the Central Government. In such cases, the compliance of parts, components or assemblies to such international or foreign national standards will be established for the purpose of rule 126, by a certificate of compliance issued by an authorized certifying agency or by an accredited certifying agency of the country of origin for such international or foreign national standards and vetted by a testing agency as referred to in rule 126.] Overall dimension 93. Overall dimension of motor vehicles.—(l) The overall width of a motor vehicle, measured at right angles to the axis of the motor vehicle between perpendicular planes enclosing the extreme points, 134[shall not exceed 2.6 metres.] 131 132 133 135 Inserted by G.S.R. 338(E), dated 26-3-1993 (w.e.f. 26-3-1993). Inserted by G.S.R. 642(E), dated 28-7-2000 (w.e.f. 28-7-2000). Inserted by G.S.R. 214(E), dated 18-3-1999 (w.e.f. 18-3-1999). Substituted by G.S.R. 221 (E), dated 28-3-2001 , for "shallnot exceed" (w.e.f. 28-3-2001). as. (i) and (ii) omitted by G.S.R. 221 dated 28-3-2001 (w.e.f. 28-3-2001). 67 Explanation.—For purposes of this rule, a rear-view mirror, or guard rail or a direction 136[rub-rail (rubber beading) having maximum thickness of 20 mm on each side indicator of the body] shall not be taken into consideration in measuring the overall width of a motor vehicle. 137 [(1 -A) The overall width of a construction equipment vehicle, measured at right angles to the axis of the construction equipment veliicle between perpendicular planes enclosing the extreme points, shall not exceed 3 metres while in the travel mode and such construction equipment vehicle 138[shall be painted by yellow and black zebra stripes on the portion of the width that exceeds 2.6 metres] on the front and rear sides duly marked for night time driving/parking suitably by red lamps at the front and rear:] 139[Provided that the zebra stripes need not be used on attachments.] The overall length of a motor vehicle other than a trailer shall not exceed— (i) in the case of motor vehicle other than transport vehicle having not more than two axles, 6.5 metres; (ii) in the case of transport vehicle with rigid frame having two or more axles, 12 metres; (iii) iii the case of articulated vehicles having more than two axles, 16 metres; (iv) m the case of truck-trailer or tractor-trailer combination, 18 metres; (v) in the case of 3 axle

passenger transport vehicles, 15 metres; (vi) in the case of single articulated (vestibule type) passenger transport vehicle, 18 metres (Please see the conditions given in note below); (vii) in the case of double articulate passenger transport vehicles, 25 metres (Please see the conditions given in note below). Note.— ln the case of single articulated passenger transport vehicles of 18 metres length and double articulated passenger transport vehicles upto 25 metres, permission of the State Government shall be obtained regarding their plying on selected routes depending upon local road conditions, width, maneuverability of the vehicle in traffic, as deemed fit. These passenger transport vehicles will also be required to have a closed circuit TV 136 Substituted by G.S.R. 221 (E), dated 28-3-2001 , for "(when in operation)" (w.e.f. 28-3- 2001). 137 Inserted by G.S.R. 642(E), dated 28-7-2000 (w.e.f. 28-7-2000). 138 Substituted by G.S.R. 1 16(E), dated 27-2-2002, for "shall be painted for the entire with by yellow and black zebra stripes" (w.e.f. 27-8-2002). 139 . Inserted by G.S.R. 1 16(E), dated 27-2-2002 (w.e.f. 27-8-2002). Sub-R. (2) substituted by G.S.R. 221 (E), dated 28-3-2001 (w.e.f. 28-3-2001 68 system for proper visibility in and around the passenger transport vehicle by the driver to maintain safety. Intercom system shall also be provided in such passenger transport vehicle. In addition, the standing passenger will be allowed only on the lower deck of double articulated passenger transport vehicle.] (3) In the case of an articulated vehicle or a tractor-trailer combination specially constructed and used for the conveyance of individual load of exceptional length,— (i) if all the wheels of the vehicle are fitted with pneumatic tyres, or (ii) if all the wheels of the vehicle are not fitted with pneumatic tyres, so long as the vehicle is not driven at a speed exceeding twenty-five kilometers per hour, the overall length shall not exceed 18 metres. Explanation.— For the purposes of this rule "overall length" means the length of the vehicle measured between parallel planes passing through the extreme projection points of the vehicle exclusive of— (i) a starting handle; (ii) any hood when down; (iii) any fire-escape fixed to a vehicle; (iv) any post office letter-box, the length of which measured parallel to the axis of the vehicle, does not exceed 30 centimeters; (v) any ladder used for loading or unloading from the roof of the vehicle or any tail or indicator lamp or number plate fixed to a vehicle; (vi) any spare wheel or spare wheel bracket or bumper fitted to a vehicle; (vii) any towing hook or other fitment which does not project beyond any fitment covered by clauses (iii) to (vi). 1 41 [(3-A)The overall length of the construction equipment vehicle, in travel shall not exceed 12.75 metres: Provided that in the case of construction equipment vehicle with more than two axles, the length shall not exceed 18 metres. Explanation.—For the purposes of this sub-rule "overall length" means the length of the vehicle measured between parallel planes through the extreme projection points of the vehicle, exclusive of— (i) any fire-escape fixed to a vehicle; (ii) any ladder used by the operator to board or alight the vehicle; (iii) any tail or indicator lamp or number plate fixed to a vehicle; 141 Inserted by G.S.R 28-7-2000 (w.e.f. 28-7-2000). 69 (iv) any sphere wheel or sphere wheel bracket or bumper fitted to a vehicle; (v) any towing hook or other fitments; (vi) any operational attachment on front, rear or carrier chassis of construction equipment vehicle in travel mode.] (4) The overall height of a motor vehicle measured from the surface on which the vehicle rests,— (i) in the case of a vehicle other than a double-decked 142[transport veliicle], shall not exceed 3.8 metres; in the case of a double decked transport vehicle, shall not exceed 4.75 metres; (ii-a) in the case of tractor-trailer goods vehicle, shall not exceed 4.20 metres;] (iii) in the case of a laden trailer carrying ISO series 1 Freight Container, shall not exceed 4.2 metres: Provided that the provisions of clauses (i) to (iii) shall not apply to fire-escape tower wagons and other special purpose vehicles exempted by genera! or special order of registering authority. No part of the construction equipment vehicle in travel mode other than a direction indicator, or a driving mirror, shall project laterally more than 300 millimetres beyond the extreme outer edge of the tyres or wheel drums regardless of single or dual tyres or rollers.] No motor vehicle shall be loaded in such a manner that the load or any part thereof extends,— (i) laterally beyond the side of the body; (ii) to the front beyond the foremost part of the load body of the vehicle; (iii) to the rear beyond the rear most part of the vehicle; (iv) to a height beyond the limits specified in sub-rule (4): Provided that clause (iii) shall not apply to a goods carriage when loaded with any pole or rod or indivisible load so long as the projecting part or parts do not exceed the distance of one metre beyond the rear most point of the motor vehicle. 146[93-A. Overall dimension for agricultural tractors.—(l) The overall width of the agricultural tractor shall not exceed 2.6 metres. 1 42 143 145 Substituted by G.S.R. 589(E), dated 16-9-2005, for "motor vehicle" (w.e.f. 16-9-2006). Cl. (ii) substituted by G.S.R. 589(E),dated 16-9-2005(w.e.f. 16-9-2006). Inserted by G.S.R. 28-7-2000 (w.e.f. 28-7-2000). Renumbered by G.S.R. 338(E), dated 26-3-1993 (w.e.f. 26-3-1993). 70 (2) The overall length of the agricultural tractor

shall not exceed 6.5 metres. (3) The overall height of the agricultural tractor shall not exceed 3.8 metres. (4) The overhang of the agricultural tractor shall not exceed 1.85 metres: Provided that lateral projection upto 700 millimetres beyond the central line of the rear wheel shall be permitted.] 147 [93-B. Overall dimension for power tillers.—(l) The overall length of the power tiller with a riding attachment shall not exceed 3.5 metres. (2) The overall width of the power tiller with a riding attachment including case wheelers shall not exceed 1.5 metres. (3) The maximum overall height of the power tiller shall not exceed 2.0 metres. (4) The overall length of the power tiller when coupled to a trailer shall not exceed 6.0 metres. (5) The maximum overall width of the power tiller when coupled to a trailer shall not exceed 1.7 metres. (6) The maximum overall height of the power tiller when coupled to a trailer shall not exceed 2.0 metres.] Size, nature and condition of tyres 94. Condition of tyres.— 149[Every motor vehicle including agricultural tractor and its trailer] shall be fitted with pneumatic tyres and every construction equipment vehicle, other than steel drum rollers of vibratory compactors or compactor rollers or road roller or a track laying vehicle, shall be fitted with pneumatic tyres or solid rubber tyres.] (2) The pneumatic tyres of a motor vehicle including agricultural tractor and its trailer shall be kept properly inflated and in good and sound condition. (3) For the purpose of sub-rule (2), a tyre shall not be deemed to be of good and sound condition if— (i) any of the fabric of its casing is exposed by wear of the tread or by any unvulcanised cut or abrasion in any of its parts; or (if) it shows signs of incipient failure by local deformation or swelling; or 146 147 148 149 Inserted by G.S.R. 11 1 dated 10-2-2004 (w.e.f. 10-8-2004). R. 93-8 inserted by G.S.R. 589(E), dated 16-9-2005 (w.e.f. 16-9-2006). Substituted by G.S.R. 642(E), dated 28-7-2000 (w.e.f. 28-7-2000). Substituted by G.S.R. 11 1 (E), dated 10-2-2004, for "Every motor vehicle" (w.e.f. 10-8- 2004). 71 (iii) it has been patched or repaired by an outside gaiter or patch other than a vulcanised repair; the Non-Skid Depth (NSD), shall not be less than 0.8 mm in the case of two- wheeler and three-wheeler and 1.6 mm in the case of other motor vehicles, below the Tread Wear Indicator (TWI) embedded in tyres at the time of manufacture:] Provided that the requirement specified in clause (iii) shall not apply to a temporary repair effected to enable the vehicle to be moved to the nearest place where the tyre can be repaired or replaced: Provided further that where a motor vehicle, other than road roller or track laying vehicle, is not fitted with pneumatic tyres, it shall not be used in a public place unless it is fitted with shoes or other suitable device so that plying of such vehicle does not damage the road: 151 [Provided also that the requirements of the Non-Skid Depth (NSD) and Tread Wear Indicator (TWI) specified in clause (iv) shall not be applicable for the agricultural tractor tyres.] 95. Size and ply rating of The tyres including radial tyres used on all motor vehicles manufactured or imported on and after the 1st day of April, 2006, other than agricultural tractors, construction equipment vehicles and power tillers shall comply with the requirements specified in AIS:044 (Part 1 to 3): 2004 as applicable till the corresponding BIS specifications are notified under the Bureau of Indian Standards Act, 1 986 (63 of 1986): Provided that the selection and fitment of tyres for motor vehicles manufactured or imported on and from the 1st day of April, 2006 shall be in accordance with AIS: 050:2004 in the case of two and three-wheelers and AIS: 051 :2004 in the case other motor vehicles, till such time the corresponding BIS specifications are notified under the Bureau of Indian Standards Act, 1986 (63 of 1986): Provided further that Central Institute of Road Transport, Pune and any other agency which may be authorised by Central Government from time to time can carry tests for verification against AIS:044:2004 for tyres for the purposes of rule 126.] 150 Substituted by G.S.R. Ill(E),dated 10-2-2004, for "a motor vehicle" (w.e.i, 10-8-2004). 151 Inserted by G.S.R. 10-2-2004 (w.e.f. 10-8-2004). 152 Sub-R. (l) substituted by G.S.R. 589(E), dated 16-9-2005 (w.e.f. 16-9-2005). 72 maximum gross vehicle weight and the maximum safe axle weight of each axle of a vehicle shall, having regard to the size, nature and number of tyres and maximum weight permitted to be carried by the tyres as per sub-rule (1), be— (i) vehicle rating of the gross vehicle weight and axle weight respectively as duly certified by the testing agencies for compliance with rule 126, or (ii) the maximum vehicle weight and maximum safe axle weight of each vehicle respectively as notified by the Central Government, or (iii) the maximum total load permitted to be carried by the tyre as specified in sub-rule (1) for the size and the number of the tyres fitted on the axle(s) of the vehicle, whichever is less: Provided that the maximum gross vehicle weight in respect of all vehicles, including multi axle vehicles shall not be more than the sum total of all the maximum safe axle weights put together. 154 155 [(2-A) The size of the tyres of a construction equipment vehicle] specified in column (1) of the Table below shall have a ply rating specified in the corresponding entry in column (2) of the said Table in respect of maximum weight

permitted to be carried by such tyre specified in the corresponding entry in column (3) thereof: Provided that the maximum safe load for single axle with two or more tyres shall not exceed 10.2 tonnes. OFF-THE-ROAD SERVICE: CONVENTIONAL AND WIDE BASE DIAGONAL PLY TYRES TABLE ÄGÄiÖÜLfrÜÄÄÜäÄÄÖtÖÄbÄiVEWÄÉÉL¯ Tyre size Designation Ply rating 8.3/8-24 8.3/8-32 I I .2/10-28 12.4/11-24 4 6 4 6 8 4 6 Maximum weigh t permitted to be carried 630 825 730 925 900 1320 950 153 Inserted by G.S.R 214(E), dated 18-3-1999 (w.e.f. 18-3-1999). 154 Inserted by G.S.R. 642(E), dated 28-7-2000 (w.e.f. 28-7-2000), 155 Substituted by G.S.R. 720(E), dated 10-9-2003, for the brackets, figure and words "(2) The size of the tyres of a construction equipment vehicle" (w.e.f. 10-10-2003). 73 12.4/11-28 12.4/11-36 12.4/11-38 13.6/12-28 16.9/14-28 ROAD GRADER 13.00-24 14.00-24 8 4 6 8 IO 12 4 6 4 6 8 4 6 8 IO 12 6 8 IO 12 8 12 12 1450 1 030 1285 1 550 1 600 1 650 1450 1 500 1 750 1450 1 650 1 750 1 800 1 850 2180 2430 2725 2040 2485 3015 OFF TI IE ROAD HAULAGE SERVICE TYRES Tyre size Designation 12.00-20 12.00-24/25 13.00-24/25 14.00-24/25 16.00-24/25 18.00-24/25 WIDE BASE 23.5-25 Ply rating 14 16 14 16 18 16 20 24 20 24 28 12 16 20 24 28 32 12 16 20 24 Maximum weight permitted to be carried 2650 2900 3000 3250 3875 4000 4625 5150 5450 6000 6700 4750 5600 6500 7300 8000 8750 5300 6150 7300 8000 74 156[1 .] The load rating for tyres not covered by the aboveTable may be notified by Note.— the Central Government as and when such tyres are introduced on construction equipment vehicles, and until these are notified, the provisional load rating declared by the construction equipment vehicle manufacturer may be certified by the certifying test agency referred to in rule 126.] 157 [2. The maximum axle loading capacities shall be verified based on the safe loading capacities of the tyres. In cases where the axle load exceed 10.2 tonnes, the vehicle manufacturer shall ask the user to seek the prior permission of the concerned Regional or State Transport Authorities in whose jurisdiction the construction equipment vehicle is expected to ply depending upon the conditions of roads/bridges, where deemed fit. Such construction equipment vehicles whose axle load exceeds 10.2 tonnes shall display permanently on the vehicle a placard indicating "NOT FOR PLYING ON ROADS". These conditions shall be mentioned in the certificate, issued by the testing agencies referred to in the rule 126, where the axle load exceeds 10.2 tonnes.] (3) No tyre shall have a ply rating more than 20, for applications of on-highway and such ply rating shall not be prescribed by either vehicle manufacturer or employed by vehicle user on this class of vehicle. (4) Check on sub-rule (3) of rule 95 on commercial vehicles will be conducted by the authority indicated in sub-rule (1) of rule 126, while conducting the checks.] Every tyre manufacturer shall, in addition to any trade mark or size of the tyre, also emboss on it the following, namely:— (i) Week and year code or month and year code of manufacture; and maximum load carrying capacity.] In the case of Indian manufactured vehicles and imported vehicles (new and old), the size of tyres if included in the International Standards, namely, ECE, JATMA, ETRTO and T&RA besides Bureau of Indian Standards may also be accepted under this Provided that the following conditions shall be complied with: (i) that testing agencies referred to in rule 126 shall satisfy themselves about the load and speed rating of the tyre with reference to the Indian conditions; 156 The existing note numbered as "1 " by G.S.R. 116(E), dated 27-2-2002 (w.e.f. 27-8- 2002). 157 Inserted by G.S.R. 1 1 6(E), dated 27-2-2002 (w.e.f. 27-8-2002). 158 Inserted by G.S.R. 221 (E), dated 28-3-2001 (w.e.f. 28-9-2001 159 Inserted by G.S.R 400(E), dated 31-5-2002 (w.e.f. 31-5-2002). 75 (it) that the test report/certificate issued by the testing agency of the country of origin shall be verified for acceptance by the testing agency referred to in rule 126; (iii) that for tubeless tyres fitted on imported vehicles confirming to conditions (l) and (it) shall also be allowed.] 160[95-A. Size and ply rating of tyres for agricultural tractor.—(l) The tyre of the agricultural tractor shall have load carrying capacity as may be specified by the tyre manufacturer, subject to the condition that the maximum load specified by the agricultural tractor manufacturer shall not be greater than the load permitted by the tyre manufacturer. (2) The agricultural tractor manufacturer shall select only that rim size as recommended by the tyre manufacturer. Note.—For compliance to the above two sub-rules, the following shall be referred to IS: 131 54-1991 as amended from time to time—Tyres for agricultural tractor, implements and power tillers. In case a particular size of tyre is not listed in IS: 13154-1991, any equivalent International Standard like Economic Commission of Europe (ECE), Japanese Automotive Tyre Manufacturers Association (JATMA), European Tyre and Rim Technical Organisation (ETRTO), The Tyre and Rim Association Inc. (T & RA) and Indian Tyre Technical Advisory Committee (ITTAC), etc., shall be accepted.] 161 [95-B. Size and ply rating of tyres for power tillers.—(l) The tyre should have load carrying capacity as specified by the tyre manufacturer, however, the maximum load

specified by the power tiller manufacturer shall not be greater than that permitted by the tyre manufacturer. (2) The power tiller manufacturer shall select the recommended/ preferred rim sizes only, as suggested by the tyre manufacturer. Note.—For compliance to this rule, the following standards shall be referred to, namely:— (i) 1ST3154-1991 , as amended from time to time-Tyre for agricultural tractor, implement and power tillers. (it) In case a particular size of tyre is not listed in IS: 131 54-1991 , as amended from time to time, any equivalent International Standard like ECE, ITTAC, 160 Inserted by G.S.R 11 1 dated 10-2-2004 (w.e.f. 10-8-2004). 161 R 95-B inserted by G.S.R. 16-9-2005 (w.e.f. 16-9-2006). 76 Brakes, steering gears, safety glass and windscreen wipers Every motor vehicle, other than a motor cycle, three-wheeled invalid 96. Brakes.— carriage, trailer or a road roller shall be equipped with two independent and efficient braking systems, namely, the parking brake and foot operated service brake: Provided that a motor cycle and three-wheeled invalid carriage shall be equipped with the independent and efficient braking systems, either both hand operated or one foot operated and the other hand operated.] (2) The braking system shall be of strength capable of stopping the vehicle within the distance specified in sub-rule (8) and of holding it at rest in all conditions and all such brakes at all time be properly connected and maintained in efficient condition. 163 (3) In every motor vehicle 164[other than agricultural tractors,] the brakes operated by one of the means of operation shall act directly upon the wheel and not through the transmission gear. Every motor vehicle manufactured on and after the 1 st day of April, 2006 shall have a braking system whose performance shall conform to the following Indian Standard, namely:— (i) for two-wheelers and three-wheelers IS: 14664: 1 999, as amended from time to time. Sl. Type of vehicle No Load Laden to the registered GVW or Unladen Laden or Unladen Unladen Unladen Laden to test mass Table. Test speed (The Type of brake speed at which the 1. 2. 3. 4. 162 163 1 64 165 All vehicles other than motor cycles, three- wheelers and agricultural tractors Do Do Motorcycles Three-wheelers including three-wheeler tractors for trailer Agricultural tractors brake should be applied) (Kmph) 30 30 40 40 30 30 25 Fool operated service do do Foot or hand o erated Foot operated (brakes operational: on at least two wheels Foot operated service Stopping distance (m) 13 13 21 21 21 IO Substituted by G.S.R. 338(E), dated 26-3-1993 (w.e.f. 26-3-1993). Proviso omitted by G.S.R. 338(E), dated 26-3-1993 (w.e.f. 26-3-1993). Added by G.S.R. 338(E), dated 26-3-1993 (w.e.f. 26-3-1993). Sub-R. (4) substituted by G.S.R. 589(E), dated 16-9-2005 (w.e.f. 16-9-2005). 77

5. All other than three- wheelers of engine Laden to the registered capacity not exceeding GVW or 500 cc, motor cycles and Unladen agricultural tractors 30 40 30 40 -do- -do- -do- -do- 12.7 15.0 9.3 12.0 For the purpose of this test for vehicles other than motor cycles the "unladen" means the vehicle is without any load and shall carry only the driver and another person for specific purpose of supervising the test, and the instruments, if any. In the case of motor cycles, the "unladen" means that vehicle will carry only the single rider and the measuring instrument, if any.] The following category of vehicles shall be fitted with Anti-Lock Braking System conforming to IS:1 18522003 (Part (0 N2 and N3 category of vehicles other than tractor-trailer combination manufactured on and after the 1st day of October, 2006 meant for carrying hazardous goods and liquid petroleum gas; (ii) N3 category vehicles manufactured on and after the 1st day of October 2007, which are double decked transport vehicles; (iii) N3 category vehicles manufactured on and after the 1st day of October 2007, that are used as tractor-trailer combinations. (iv) M3 category of buses that ply on All India Tourist permit, manufactured on and after the ISt day of October, 2007.] 167 [96-A. Brakes for construction equipment vehicle.—(l) Construction equipment vehicle with hydrostatic transmission shall employ either hand or foot operated hydrostatic braking system both for service and parking brake system acting at least on two wheels on the same axle or drum. (2) The braking system shall be of a strength capable of stopping the vehicle within the distance specified in sub-rule (8) and of holding it at rest in all conditions, and all such brakes shall at all times be properly conducted and maintained in efficient condition. (3) In every construction equipment vehicle, other than those having hydrostatic transmission, the brakes operated by any of the means of operation shall act directly upon the wheel or at a suitable location in the power train provided that such an action does not discouple, disengage or isolate- the braking action from the wheels. (4) Every construction equipment vehicle which manufactured on or after the commencement of the Motor Vehicles (Sixth Amendment) Rules, 2000, shall have a 166 Sub-R. (9) inserted by G.S.R. 589(E), dated 16-9-2005 (w.e.f. 16-9-2005). 167 Inserted by G.S.R. 642(E), dated 28-7-2000 (w.e.f. 28-7-2000). 78 braking system whose performance shall A[conform to the test and stopping distance formula as specified in sub-rule (7)]. (5)

The braking system or one of the braking systems of construction equipment vehicle, shall be so constructed and maintained that it can effectively prevent at least two wheels or drums from revolving when the vehicle is left unattended and it shall be designed to be applied through hand or foot or automatically when engine is not running. (6) In the case of construction equipment vehicles with four or more than four wheels, the service brake shall work on at least two wheels of the vehicle. service braking system of the construction equipment vehicle shall be capable of bringing the vehicle to a halt within the stopping distance as calculated by the formula given below, when tested in unladen condition and attachment carry position at a speed corresponding to 80 per cent, of the design maximum speed. The test shall be conducted in the forward direction of travel on a dry level hard road in good condition and during the test the acceleration control or travel shall be fully released and in the case of vehicle with manual gear shifting control, the top gear and the clutch shall be engaged.] STOPPING DISTANCE FORMULA s 0.1 5v + 012/1 30), Where S is the Stopping distance in metres, V is the test speed corresponding to 80% of design maximum speed in Km / h., Control force F < 700 Newtons. Explanation.—For the purposes of this sub-rule, "unladen" means the construction equipment vehicle in travel mode without any load except the driver and another person for the specific purpose of supervising the test and the instruments, if any: Provided that while the stopping distance formula mentioned above remain unchanged, the construction equipment using hydrostatic transmission, the brake test shall be performed by positioning the gear change lever to the neutral position.] 169 170 [96-B. High Speed Braking Requirements].—For high speed braking, the following test procedure shall be followed, namely:— 168 Substituted by G.S.R. 1 16(E), dated 27-2-2002 (w.e.f. 27-8-2002). 169 Inserted by G.S.R. 400(E) dated 31-5-2002 (w.e.f. 31-5-2002). 170 Substituted by G.S.R. 720(E), dated 10-9-2003, for the figures, letter and words "96-A High Speed Braking Requirements" (w.e.f. 10-10-2003). 79 (a) in the case of Category M-l, the P type, service brake test as defined under IS: 11852-2001—Part 3, shall be carried out in the engine connected mode at a test speed of 120 km/h or at 80% of the design maximum speed of the vehicle, whichever is lower. (b) the stopping distance requirements shall be according to the following formula, namely:— s 0.1 v + 0/2/130): where, S is the Stopping Distance in mtrs. V is the test speed in km/h, and Control force 500 Newtons. Provided that this sub-rule shall be applicable in case of new vehicles yet to be type approved after six months, and in case of already type approved vehicles, twelve months, from the date of the commencement of the Central Motor Vehicles (Third Amendment) Rules, 2002.] 171[96-C Brakes for agricultural tractor.—The braking system of the agricultural tractor shall conform to IS: 12061 -1994 and IS: 12207-1999, as amended from time to time.] 172[96-D. Braking requirements for power tillers.—The power tillers when coupled to a trailer shall meet the following requirements, namely:— (i) the brake test for the power tiller coupled to a trailer shall be carried out with a gross combination weight not exceeding 1.5 tons as declared by the manufacturer; (ii) The brake test shall be conducted at a speed of 15 km/h to meet the stopping distance requirement of 7.5 metres with the pedal effort not exceeding 600N; (iii) The trailer coupled to the power tiller shall be fitted with a parking brake capable of holding the combination on an up-slope and down-slope gradient of 12%.] 173[Every trailer, other than a tractor-drawn trailer, having 97. Brakes for trailers.—(l) five hundred kilograms and more of weight] shall have an efficient braking system which are capable of being applied when it is being drawn,— (i) in the case of trailer having not more than two axles, to at least all the wheels of one axle; or (ii) in the case of a trailer having more than two axles, to at least all the wheels of two axles: Provided that the braking system shall be so constructed that it is not rendered ineffective by the non-rotation of the engine of the drawing vehicle. 171 Inserted by G.S.R. 11 1 (E), dated 10-2-2004 (w.e.f. 10-8-2004). 172 R. 96-1) inserted by G.S.R 589(E), dated 16-9-2005 (w.e.f 16-9-2006). 173 Substituted by G.S.R. 933(E), dated 28-10-1989 (w.e.f. 28-10-1989). 80 (2) The provision of sub-rule (1) shall not apply to,— (i) any land implement drawn by a motor vehicle; (ii) any trailer designed for use and used by a local authority for street cleansing or by the fire service for fire fighting, which does not carry any load other than its necessary gear and equipment; (iii) any disabled vehicle which is being drawn by a motor vehicle in consequence of its disablement

98. Steering) The steering gear of every motor vehicle shall be maintained in good and sound condition, free from back-lash exceeding 30 degrees on the steering 4[ball joints connecting the steering linkage,] shall be protected by rubber wheel, all caps and where the connections are secured with bolts or pins, the bolts or pins shall be effectively locked. The steering gear of every motor vehicle shall be so constructed as to conform to IS: 12222-1987, as amended from time to time.] 177[On and after

1st May, 2003], the steering effort of all motor vehicles other than 8[and invalid carriages] three-wheelers not fitted with steering wheel, motor cycles, manufactured shall conform to the Indian Standard IS: 11948-1999, as amended from time to time.]] Every heavy passenger motor vehicle manufactured after expiry of six months from the date of commencement of the Central Motor Vehicles (Amendment) Rules, 2000 (including the date of such commencement), shall be fitted with power steering gears.] The power steering shall be fitted in,— (a) the Category N3 multi-axle vehicles on and from 1st May, 2004; and (b) other than multi-axle vehicles of Category N3 on and from 1st December, 2004.] Substituted by G.S.R. 338(E), dated 26-3-1993 (w.e.f. 26-3-1993). Sub-R. (2) substituted by G.S.R. 11 1 (E), dated 10-2-2004 (w.e.f. 10-8-2004). Sub-R.(3) substituted by G.S.R. 400(E), dated 31-5-2002 (w.e.f. 31-5-2002). Substituted by G.S.R. 845(E), dated 27-12-2002, for "On and after 1st January, 2003" (w.e.f. 27-12-2002). Substituted by G.S.R. 1 1 1 (E), dated 10-2-2004, for "invalid carriages and agricultural tractors" (w.e.f. 10-8-2004). Inserted by G.S.R. 65(E), dated 25-1-2000 (w.e.f. 25-1-2000). Sub-R (5) substituted by G.S.R. Ill(E),dated 10-2-2004 (w.e.f. 10-8-2004). Earliersub- R. (5) was inserted by G.S.R. 845(E), dated 27-12-2002 (w.e.f. 27-12-2002). 81 181 [98-A. Steering gears for construction equipment vehicles.—(l)The steering system of every construction vehicle shall be maintained in good and sound condition, with backlash not exceeding 30 degrees on the steering wheel when tested with the engine running; ball-joints connecting the steering linkage of the mechanical steering system shall be protected by rubber caps and where the connections are secured with bolts or pins, the bolts or pins shall be effectively locked; in the case of hydrostatic steering system the moving parts shall be effectively sealed and protected from dust ingress. (2) The steering system of the construction equipment vehicle shall be adequately designed to ensure efficient and effective control of the vehicle under all the driving conditions and shall be so constructed as to conform to the Indian Standards IS: 12222- (1 987), as modified from time to time. (3) The steering effort of the construction equipment vehicles during normal unladen operation shall not exceed 11.7 kg push/pull for hydrostatic steering system and 20 kg for manual steering wheel system when evaluated as per clauses 5.1 to 5.4 of Indian Standards IS: 1 1948-(1986) as specified by the Bureau of Indian Standards.] 182[98-B. Steering Gears for agricultural tractors.—(l) The steering gear of agricultural tractor shall be maintained in good and sound condition, free from backlash exceeding 30 degrees on the steering wheels. All ball joints connecting the steering linkage shall be protected by rubber caps and where the connections are secured with bolts, or pins, the bolts or pins shall be effectively locked. (2) The turning circle diameter and turning circle clearance diameter of every agricultural tractor shall conform to IS: 1 1859-1986, as amended from time to time. (3) The steering effort requirement of agricultural tractor shall conform to Automotive Industry Standard (AIS): 042 as amended from time to time, till such time the corresponding BIS standard is notified.] 183[98-C. Steering gear for power tillers.—The turning circle diameter and the turning clearance circle diameter of power tillers coupled to trailers, when measured as per IS: 12222:1987, as amended from time to time, shall not exceed 10 metres.] 99. Forward and backward motion.—Every 184[motor vehicle including 185[construction equipment vehicle] and agriculture tractor] other than a motor cycle and three-wheeled 181 182 183 Inserted by G.S.R. 642(E), dated 28-7-2000 (w.e.f. 28-7-2000). Inserted by G.S.R. 10-2-2004 (w.e.f. 10-8-2004). R. 98-C inserted by G.S.R. 589(E), dated 16-9-2005 (w.e.f. 16-9-2006). Substituted by G.S.R. 1 16(E), dated 27-2-2002, for "motor vehicle" (w.e.f. 27-8-2002). 82 invalid carriages, shall be capable of moving under its own power 186[in the reverse direction also]: 187 [Provided that power tillers with a riding attachment and power tillers coupled to trailers shall be capable of moving under its own power in the reverse direction also.] 100. Safety glass.—(l) The glass of windscreens and the windows of every motor vehicle 188[other than agricultural tractors] shall be of safety glass: Provided that in the case of three-wheelers and vehicles with hood and side covers, the windows may be of 189[acrylic or plastic transparent sheet.] Explanation.—For the purpose of this rule,— (i) "safety glass" means glass 190[conforming to the specifications of the Bureau of Indian Standards or any International Standards [* * *]] and so manufactured or treated that if fractured, it does not fly or break into fragments capable of causing severe cuts; (ii) any windscreen or window at the front of the vehicle, the inner surface of which is at an angle 191[more than thirty degrees] to the longitudinal axis of the vehicle shall be deemed to face to the front. The glass of the windscreen and rear window of every motor vehicle shall be such and shall be maintained in such a condition that the visual transmission of light is not less than 70%. The glasses used for side windows are such and shall be maintained in such condition that the visual transmission of light is not less than 50%, and shall conform to Indian Standards 193[IS:

2553— Part 2—1992]; The glass of the front windscreen of every motor vehicle 195[other than two-wheelers and agricultural tractors] manufactured after three years from the coming into Substituted by G.S.R. 11 1 (E), dated 10-2-2004, for "construction equipment vehicle" (w.e.f. 10-8-2004). Substituted by G.S.R. 338(E), dated 26-3-1993, for "either forwards or backwards" (w.e.f. 26- 3-1993). Proviso inserted by GS.R. 589(E), dated 16-9-2005 (w.e.f. 16-9-2006). Inserted by G.S.R. 338(E), dated 26-3-1993 (w.e.f. 26-3-1993). Substituted by G.S.R. 338(E), dated 26-3-1993, for "acrylic transport sheet" (w.e.f. 26-3-1993). Substituted by G.S.R. 933(E), dated 28-10-1989, for "approved by" (w.e.f. 28-10-1989). l. The words "as certified by the Automobile Research Association of India, Pune" omitted by G.S.R. 214(E), dated 18-3-1999 (w.e.f. 18-3-1999). Substituted by G.S.R. 214(E), dated 18-3-1999, for "extending to thirty degrees" (w.e.f. 18-3- 1999). 192 Sub-R. (2) substituted by G.S.R. 338(E), dated 26-3-1993 (w.e.f. 26-3-1993). 193 Substituted by G.S.R. 214(E), dated 18-3-1999, for "IS:2253 Part (w.e.f. 18-3- 1999). 194 Inserted by G.S.R. 338(E), dated 26-3-1993 (w.e.f. 26-3-1993). 83 force of the Central Motor Vehicles (Amendment) Rules, 1993 shall be made of laminated safety glass: 196[Provided that on and from three months after the commencement of the Central Motor Vehicles (Amendment) Rules, 1999, the glass of the front windscreen of every motor vehicle other than two-wheelers and agricultural tractors shall be made of laminated safety glass conforming to the Indian Standards IS: 2553—Part 2—1992.] Explanation.—For the purpose of these sub-rules "laminated safety glass" shall mean two or more pieces of glass held together by an intervening layer or layers of plastic materials. The laminated safety glass will crack and break under sufficient impact, but the pieces of the glass tend to adhere to the plastic material and do not fly, and if a hole is produced, the edges would be less jagged than they would be in the case of an ordinary glass. 197 [(3-A) The glass of the front windscreen of a construction equipment vehicle manufactured after 3 years from the date of commencement of the Central Motor Vehicles (Sixth Amendment) Rules, 2000 shall be made of laminated safety glass.] (4) Notwithstanding anything contained in this rule if the Central Government is of the opinion that it is necessary and expedient to do so in public interest, it may, by order 198[any motor vehicle including construction published in the Official Gazette, exempt equipment vehicle] for use by any person, from the provisions of this rule.] 01 . Windscreen wiper.—(l) An efficient power operated * *] windscreen wiper shall be fitted to every motor vehicle having a windscreen, other than three-wheeled invalid carriage 201 [and motor cycles]. (2) One year from the date of commencement of Central Motor Vehicles (Amendment) 202[all motor vehicles other than three-wheelers, motor cycles and invalid Rules, 1993, carriages 203[manufactured on and after 1st January, 2003 in respect of Category MI vehicles, and in respect of other vehicles, on and after 1st May, 2003], having a wind 195 Substituted by G.S.R. 21 4(E), dated 18-3-1999, for "other than agricultural tractors" (w.e.f. 18- 3-1999). 196 Inserted by G.S.R. 214(E), dated 18-3-1999 (w.e.f. 18-3-1999). 197 Inserted by G.S.R. 642(E), dated 28-7-2000 (w.e.f. 28-7-2000). 198 Substituted by G.S.R. 642(E), dated 28-7-2000 (w.e.f. 28-7-2000). 199 Substituted by G.S.R. 338(E), dated 26-3-1993 (w.e.f. 26-3-1993). 200 The words "or foot operated" omitted by G.S.R. 21 4(E), dated 18-3-1999 (w e l" 18-3-1999). 201 Substituted by G.S.R. 589(E), dated 16-9-2005, for "motor cycles and three-wheelers of engine capacity not exceeding 500 cc" (w.e.f. 1-4-2006). 202 Substituted by G.S.R. 400(E), dated 31-5-2002 (w.e.f. 31-5-2002). 203 Substituted by G.S.R. 845(E), dated 27-12-2002, for "manufactured on and after 1st January, 2003" (w.e.f. 27-12-2002). 84 screen shall be fitted with a wind screen wiping system which shall conform to the requirements laid down in the following standards, as amended from time to time, till such time the corresponding Bureau of Indian Standards specifications are notified: (i) AIS 01 9/2001 , in the case of M-l category of vehicles (ii) AIS 01 1/2001, in the case of other vehicles.] All construction equipment vehicles having windscreen shall be fitted with an efficient power operated windscreen wiping system. The windscreen wiping system shall conform to the requirements of the standards as may be specified from time to time under these rules.] 206[102. Signalling devices, direction indicators and stop lights.— 207 [(1) The signal to turn to the right or to the left shall be given by electrically operated direction indicator lamps on all motor vehicles including construction equipment vehicles. Every construction equipment vehicle shall be fitted and maintained so that the following conditions are met, namely:— (i) The direction indicator lamps shall be of amber colour which is illuminated to indicate the intention to turn, by a light flashing at the rate of not less than 60 and not more than 120 flashes per minute. (ii) The light emitted by the lamp when in operation shall be clearly visible from both front and rear of the vehicle. (iii) The minimum illuminated area of each direction indicator shall be 60 square centimeters: Provided that nothing contained in this sub-rule shall

apply to LI category of motor cycles.] On all vehicles other than motor cycles, 209[the intention to stop the vehicle (other than construction equipment vehicle having hydrostatic brakes)] shall be indicated by two electrical stop lamps which shall be red in colour and shall be fitted one on each left and right-hand sides at the rear of the vehicle. The stop lamps shall light up on the actuation of the service brake control. In the case of motor cycle, the intention to stop the vehicle shall be indicated by one stop lamp at the rear which shall light up on the actuation of the control operating the brakes on the rear wheels.] 204 Sub-R. (2-A) substituted by G.S.R. 1 16(E), dated 27-2-2002 (w.e.f. 27-8-2002). Earlier sub-R. S2-A) was inserted by G.S.R. 642(E), dated 28-7-2000 (w.e.f. 28-7-2000). Sub-R. (3) omitted by G.S.R. 589(E), dated 16-9-2005 (w.e.f. 16-9-2005). 206 Substituted by G.S.R. 33S(E), dated 26-3-1993 (w.e.f. 26-3-1993). 207 Sub-R. (1) substituted by G.S.R. 589(E), dated 16-9-2005 (w.e.f. 14-2006). 208 Sub-R. (2) substituted by G.S.R. 21 4(E), dated 18-3-1999 (w.e.f. 18-3-1999). 209 Substituted by G.S.R. 642(E), dated 28-7-2000 (w.e.f. 28-7-2000). 85 (3) One year from the date of commencement of the Central Motor Vehicles (Amendment) Rules, 1993, the stop lamp of every motor cycle shall be so designed and fitted that it will light up on actuation of any of the controls which actuate the brakes on any wheel.] 103. Position of the indicator.—(l) A direction indicator shall be fitted and every direction indicator shall be so designed and fitted that -"[the driver of the vehicle including a construction equipment vehicle] when in his driving seat is aware that it is operating correctly. 210 [(2) One year from the date of commencement of the Central Motor Vehicles (Amendment) Rules, 1993, 21[every motor vehicle including a construction equipment vehicle] other than [* * *] motor cycles shall be equipped with such a device that when the vehicle is in an immobilized condition all the direction indicators flash together giving hazard warning to other road users.] 212[104. Fitment of Every motor vehicle manufactured on and after the 1st day of April, 2006, including trailers and semi-trailers, other than three-wheelers and motor cycles shall be fitted with two red reflectors, one each on both sides at their rear. Every motor cycle shall be fitted with at least one red reflex reflector at the rear: Provided that a reflective tape or reflective paint of not less than 20 mm width and running across the width of the body shall be affixed/painted at the front and rear of every goods carriage.] (2) Every goods carriage vehicle including trailers and semi-trailers other than three- wheeler *] shall be fitted with two white reflectors one each at the extreme right and left bottom corners in the front of the vehicle and facing to the front. The reflecting area of each reflector shall not be less than 28.5 sq. centimetres, in the case of vehicles with overall length of more than 6 metres, and not less than 7 sq. centimetres in case of other vehicles.] 210 Substituted by G.S.R. 1 16(E), dated 27-2-2002, for "the driver of the vehicle" and "every motor vehicle", respectively (w.e.f. 27-8-2002). 211 Substituted by G.S.R. 338(E), dated 26-3-1993 (w.e.f. 26-3-1993). 212 23. The words "three wheelers of engine capacity not exceeding 500 cc and" omitted by G.S.R. 589(E), dated 16-9-2005 (w.e.f. 1-4-2006). 213 Sub-R. (1) and the proviso substituted by G.S.R. 589(E), dated 16-9-2005 (w.e.f. 16- 9-2005). 214 The words "of engine capacity not exceeding 500 cc" omitted by G.S.R. 589(E), dated 16-9-2005 (w.e.f. 1-4-2006). 86 All trailers including semi-trailers, other than those drawn by three-wheeled tractors * *] shall be fitted with the following reflex reflectors, namely,— (i) two white reflex reflectors in the front, one each at the right and left corners at a height not exceeding 1500 mm above the ground, (ii) two red reflex reflectors in the rear, one each at the right and left corners at a height not exceeding 1500 mm above the ground, and (iii) the area of the reflectors referred to above shall not be less than 28.5 sq. cm. in the case of trailers with overall length exceeding 6 metres and shall not be less than 7 sq. cm. in case of other trailers.] On and after expiry of one year from the date of commencement of the Central Motor Vehicles (Amendment) Rules, 1999, the reflectors referred to in this rule and in rule 1 10 shall be of reflex type conforming to till the corresponding BIS specifications are notified under the Bureau of Indian Standards Act, 1986 (63 of 1986)]. On and from the date of commencement of the Central Motor Vehicles Rules, 1 993, every motor vehicle and trailer of length exceeding 6 metres shall be fitted with two amber coloured reflex reflectors on each left hand and right hand of the vehicle, one set as close to the front end as possible and the other set as close to the rear end as possible. The height of the side reflectors above the ground shall not be more than 1 500 mm. The area of each reflector shall not be less than 28.5 sq. cm.: Provided that in case the distance between the two side reflectors is more than 3 metres, additional intermediate side reflectors shall be fitted so that the distance between any adjacent side reflector is not more than 3 metres.] 219[1 04-A. Fitment of reflectors on construction equipment vehicles.—All construction equipment vehicles shall be fitted with— (i) two white reflex reflectors in the front of the vehicle on each side and visible to on- coming vehicles from the

front at night; (ii) two red reflectors in the rear of the vehicle, one each at right and left corners, at a height not exceeding 1500 mm above the ground in the case of unobstructed vision from 215 26. Substituted by G.S.R. 21 4(E), dated 18-3-1999 (w.e.f. 18-3-1999). 216 Substituted by G.S.R. 214(E), dated 18-3-1999 (w.e.f. 18-3-1999). Earlier sub-R. (4) was substituted by G.S.R. 338(E), dated 26-3-1993 (w.e.f. 26-3-1993). 217 Substituted by G.S.R. 589(E), dated 16-9-2005, for "the Indian Standards IS:8339— 1993 specified by the Bureau of Indian Standards" (w.e.f. 1-4-2006). 218 Substituted by G.S.R 338(E), dated 26-3-1993 (w.e.f. 26-3-1993). 219 Inserted by G.S.R. 642(E), dated 28-7-2000 (w.e.f. 28-7-2000). 87 the rear and the implement or device shall not obstruct the visibility of the reflectors to the following vehicle; (iii) two sets of amber coloured side reflex reflectors, one each on left hand and right hand sides of the vehicle, one set as close to the front end and the other set as close to the rear end as possible to the basic machine without attachments and if the distance between the two amber side reflex reflectors is more than 3 metres, additional intermediate amber side reflex reflectors shall be fitted so that the distance between any adjacent amber side reflex reflector is not more than 3 metres: 220[Provided that the fitment of reflex reflectors on the implements such as booms of cranes and anus of shovels, shall not be mandatory. However, wherever possible the fitment of these reflectors may be done considering the working environment/nature of these machines in the fields;] (iv) the reflecting area of each reflex reflector shall not be less than 28.5 sq. cms; (v) the construction equipment vehicle shall be fitted with a retro-reflective tape or retro- reflective paint of not less than 20 millimeters width, running across the width of the body at the front and rear, and the colour of the reflective tape or reflective paint shall be white at the front and red at the rear; (vi) the reflectors referred to in this sub-rule, shall be of reflex type conforming to Indian Standards IS: 8339 specified by the Bureau of Indian Standards; (vii) the retro-reflective tape and paint shall be as per clause 801 and 803 of Ministry of Surface Transport (Roads Wing) specifications for Road and Bridge works (3rd Revision, 1 995) as amended from time to time.] 221 [1 04-B. Fitment of reflectors for agricultural tractors.—(l) Every agricultural tractor manufactured on and after the 1st day of April, 2006 shall be fitted with two non- triangular red reflectors of not less than 7 sq. cm reflecting area one each on both sides at the rear. (2) The reflectors referred in sub-rule (1) of this rule shall be of the reflex type conforming to AIS:057:2005 till the corresponding BIS specifications are notified under the Bureau of Indian Standards Act, 1986 (63 of 1986). 1 04-C. Fitment of reflectors on power tillers.—(l) On and from one year from the date of commencement of the Central Motor Vehicles (Fifth Amendment) Rules, 2005, every power tiller shall be fitted with two white reflex reflectors of not less than 7 sq. cm 220 Substituted by G.S.R. 1 16(E), dated 27-2-2002, for the proviso (w.e.f. 27-8-2002). 221 R. 104-B inserted by G.S.R. 589(E), dated 16-9-2005 (w.e.f. 16-9-2005). 88 reflecting area in the front of the vehicle one on each side and visible to oncoming vehicles from the front at night, conforming to AIS:057:2005 till corresponding BIS specifications are notified under the Bureau of Indian Standards Act, 1986 (63 of 1986). (2) In the case of trailers attached to power tillers, two red reflectors of not less than 7 sq.cm reflecting area in the rear side, one each at right and left corners, at a height not exceeding 1 500 mm above the ground shall also be fitted.] 105. Save as hereinafter provided, every motor vehicle, while being driven in a public place, during the period half an hour after sunset and at any time when there is no sufficient light, shall be lit with the following lamps which shall render clearly discernible persons and vehicles on the road at a distance of one hundred and fifty five metres ahead:— (a) in the case of motor vehicle other than three-wheelers, three-wheeled invalid carriages and motorcycles, two or four head lamps; (b) in the case of motor cycles, three-wheelers and three-wheeled invalid carriages one or two head lamps; (c) in the case of a side car attached to a motor cycle one lamp showing a white light to the front;] (d) in the case of construction equipment vehicle, two or four lamps showing to the front white light visible from a distance of one hundred and fifty five metres ahead.] 223 * * (2) Every such motor vehicle other thana [ ] three-wheeler shall also carry— (i) 224[two lamps (hereinafter referred to as the rear lamp) showing to the rear a red light visible in the rear from a distance of one hundred and fifty-five metres; and in the case of a motor cycle one lamp showing a red light to the rear visible from a distance of seventy-five metres]; and (ii) lamp, which may be the rear lamp or some other device, illuminating with a white light the whole of the registration mark exhibited 225 226 [[on the rear of the vehicle including construction equipment vehicle], and on the side in the case of construction equipment vehicle] so as to render it legible from a distance of fifteen metres to the rear: 222 Sub-R. (1) substituted by G.S.R. 589(E), dated 16-9-2005 (w.e.f. 14-2006). 223 The words "a motor cycle and" omitted by G.S.R. 21 4(E), dated

18-3-1999 (w e 1 18-3-1999). 224 Substituted by G.S.R. 21 4(E), dated 18-3-1999 (w.e.f. 18-3-1999). 225 Substituted by G.S.R. 642(E), dated 28-7-2000, for "on the rear of the vehicle" (w.e.f. 28-7-2000). 226 Substituted by G.S.R. 1 16(E), dated 27-2-2002, for "on the rear of the vehicle" (w.e.f. 27-8- 2002). 89 Provided that when a motor vehicle is drawing another vehicle or vehicles and the distance between such vehicles does not exceed 1.5 metres, it shall be sufficient if the last drawn vehicle carries a rear lamp or a lamp illuminating the rear registration mark: 8[Provided further that every construction equipment vehicle shall also carry two lamps showing to the rear red lights visible in the rear from a distance of one hundred and fifty- five metres.] On and from the commencement of the Central Motor Vehicles (Amendment) Rules, 1993, all the obligatory front head lamps of a motor vehicle other than motor cycles shall be as nearly as possible of the same power and fixed at a height as specified in Indian Standards 40[lS: 8415—1977] (clause 4.1): Provided that in the case of four-wheel drive cross country vehicles, the maximum height of the said front head lamps may be as per limits specified in Indian Standards 40[lS: 8415—1977] (clause 4.1.1): 41 [* * *] Provided further that on and from the commencement of the Central Motor Vehicles (Amendment) Rules, 1 993, all vehicles other than three-wheelers of engine capacity less than 500 cc, motor cycles and three-wheeled invalid carriages manufactured shall be fitted with two rear lamps showing red light to the rear.] 227 [(3-A) On and from the commencement of the Central Motor Vehicles (Sixth Amendment) Rules, 2000, all the obligatory front head lamps of a construction equipment vehicle shall be as nearly as possible of the same power and fixed at a height so that front visibility is maintained and farthermost point of equipment/attachment is clearly seen by on-coming traffic] (4) The rear lamp shall be fixed either on the centre line of the vehicle or to the right hand side, and save in the case of a transport vehicle, at a height of not exceeding one metre above the ground: 228 (5) In the case of a transport vehicle/ the rear light may be fixed at such level as may be necessary to illuminate the registration mark. (6) Every heavy goods carriage 230[including trailers] shall be fitted with a red indicator lamp of size of thirty centimetres by ten centimetres on the extreme rear most body 227 Inserted by G.S.R 642(E), dated 28-7-2000 (w.e.f. 28-7-2000). 228 Substituted by G.S.R. 338(E), dated 26-3-1993 (w.e.f. 26-3-1993). 229 Proviso omitted by G.S.R. 11 1 (E), dated 10-2-2004 (w.e.f. 10-8-2004). 90 cross beam and in the case of a vehicle not constructed with body in the rear, the indicator lamp shall be fitted near the right rear light above the rear number plate: 231 [Provided that every construction equipment vehicle of an unconventiona I or extraordinary type in travel mode shall be fitted or installed with a red indicator lamp of size of not less than 100 square centimetres on the extreme rearmost point of the body.] On and from the date of commencement of the Central Motor Vehicles (Amendment) Rules, 1999, every motor vehicle manufactured shall be fitted with at least one lamp which shall automatically be operated, throwing a white light to the rear, when the vehicle is being driven in the reverse gear.] In the case of vehicles, other than three-wheelers of engine capacity not exceeding 500 CC, which are attached with trailers, all the lamps required to be fitted on the rear of the vehicle shall be fitted at the rear of the trailer.] On the commencement of the Central Motor Vehicles (Sixth Amendment) Rules, 2000, every construction equipment vehicle shall be fitted with two lamps at the rear throwing light to the rear when the vehicle is being driven in the reverse gear and there shall also be an audible warning system operating when the vehicle is being driven in the reverse gear, the audible warning system and the light being automatically operated when the vehicle is in reverse gear.] 106. Deflection of lights.—(l) No lamp showing a light to the front shall be used on 235[any motor vehicle including construction equipment vehicle] (whether fitted with single or dual head lamp) unless such lamp is so constructed, fitted and maintained that the beam of light emitted therefrom— is permanently deflected downwards to such an extent that it is not capable of dazzling any person whose eye position is,— (A) at a distance of 8 metres from the front of lamp, (B) at a distance of 0.5 metre to the right side of the lamps, i.e., fitted at right extreme of the vehicle, from the right edge of the lamp, and 230 Substituted by G.S.R. 21 4(E), dated 18-3-1999 (w.e.f. 18-3-1999). 231 Added by G.S.R. 642(E), dated 28-7-2000 (w.e.f. 28-7-2000). 232 Substituted by G.S.R. 214(E), dated 18-3-1999 (w.e.f. 18-3-1999). Earlier sub-R. (7) was inserted by G.S.R. 338(E), dated 26-3-1993 (w.e.f. 26-3-1993). 233 Inserted by G.S.R. 214(E), dated 18-3-1999 (w.e.f. 18-3-1999). 234 Added by G.S.R. 642(E), dated 28-7-2000 (w.e.f. 28-7-2000). Previously inserted by G.S.R. 214(E), dated 18-3-1999. [There seems to be some confusion/mis take in the language of Cl. 13(/) of G.S.R. 21 4(E), dated 18-3-1999 and Cl. 136) of G.S.R. 642(E), dated 28-7-2000—Ed.] 235 Substituted by G.S.R. 642(E), dated 28-7-2000 (w.e.f. 28-7-2000). 236 Substituted by G.S.R. 338(E), dated 26-3-1993 (w.e.f. 26-3-1993). 91 (C) a t a height of 1.5

metres from the supporting plane of the vehicle: 237 (b) is capable of being deflected downwards by the driver in such maimer as to render it incapable of dazzling any such person in the circumstances aforesaid; (c) is capable of being extinguished by the operation of a device which at the same time causes a beam of light to be emitted from the lamp which complies with the provision of clause (a); (d) is capable of being extinguished by the operation of a device which at the same time either deflects the beam of light from another lamp downwards or both downwards and to the left in such manner as to render it incapable of dazzling any person in the circumstances aforesaid, or brings into or leaves in operation a lamp which complies with the provisions of clause (a). The provisions of sub-rule (1) shall not apply to any lamp fitted with an electric bulb, if the power of the bulb does not exceed 7 watts and the lamp is fitted with a frosted glass or other material which has the effect of diffusing the light. 240[107. Top lights.—Every goods vehicle including trailer and semi-trailer other than three-wheelers and vehicles with overall width not exceeding 2.1 metres shall be fitted with two white lights at the top right and left comers 241 [showing white light to the front] and two red lights at the top right and 241 [showing red light to the rear]. The lights shall remain lit when the vehicle is kept stationary on the road during night and at the time of poor visibility: Provided that in the case of goods carriage without a full body in the rear, provision for fitting of the top light at the rear shall not be necessary.] 242[1 07-A. Implement lights for construction equipment vehicle.— Construction equipment vehicle having implements with front overhang greater than 60% of wheelbase shall be fixed with additional implement light of amber colour at a location nearest to the extreme edge of the implement without affecting the functions of showing light in all directions and where the implement is more than 3 metres in length, additional 237 Proviso to Cl. (a) omitted by G.S.R. 11 1 (E), dated 10-2-2004 (w.e.f. 10-8-2004). 238 Sub-R. (2) omitted by G.S.R. 338(E), dated 26-3-1993 (w.e.f. 26-3-1993). 239 Sub-R (3) renumbered as sub-R (2) by G.S.R. 338(E), dated 26-3-1993 (w.e.f. 26-3-1993). 240 Substituted by G.S.R 338(E), dated 26-3-1993 (w.e.f. 26-3-1993). 241 Substituted by G.S.R. 214(E), dated 18-3-1999 (w.e.f. 18-3-1999). 242 Inserted by G.S.R. 642CE), dated 28-7-2000 (w.e.f. 28-7-2000) 92 amber coloured lamps shall be fixed at a distance of not exceeding 3 metres for the entire length of the implement: Provided that in case of rear overhang the additional implement lights shall be in red colour.] 243[108. Use of red, white or blue light.—(l) No motor vehicle shall show a red light to the front or light other than red to rear: Provided that the provisions of tills rule shall not apply to— (i) the internal lighting of the vehicle; or (ii) the amber light, if displayed by any direction indicator or top light or as top light used on vehicle for operating within the premises like airports, ports without going outside the said premises on to public roads; (iii) a vehicle carrying high dignitaries as specified by the Central Government or the State Government, as the case may be, from time to time; (iv) the blinker type of red light with purple glass fitted to an ambulance van used for carrying patients; or (v) to a vehicle having a lamp fitted with an electrical bulb, if the power of the bulb does not exceed seven watts and the lamp is fitted with frosted glass or any other material which has the effect of diffusing the light; (vi) white light illuminating the rear number plate; (vii) white light used while reversing; (viii) plough light provided in agricultural tractors for illuminating the implement's working area on the ground in agricultural field operations. (2) Use of blue light with flasher shall be determined and notified by the State Governments at their discretion. (3) Use of blue light with or without flasher shall be pennitted as top light on vehicles escorting high dignitaries entitled to the use of red light. (4) Use of multi-coloured red, blue and white light shall be permitted only on vehicles specifically designated for emergency duties and shall be specifically specified by State Governments. (5) The State Government shall inform the Central Government regarding publication of notifications issued by the concerned State Government under sub-rule (2) and under clause (e) of the Notification No. S.O. 52(E), dated 11th January, 2002, published in the 243 Substituted by G.S.R. 400(E), dated 31-5-2002 (w.e.f. 31-5-2002). 93 Gazette of India, Ministry of Road Transport and Highways, regarding use of red light on top of vehicle being used by dignitaries. (6) In case vehicle is not carrying dignitaries, red or blue light, as the case may be, light shall not be used and be covered by black cover.] 244[1 08-A. Use of red or white light on construction equipment vehicles.— No construction equipment vehicle shall show a red light to the front or light other than red to the rear: Provided that the provision of this rule shall not apply to:— (i) the internal lighting of the vehicle; (ii) the amber light, if displayed by any direction indicator or top light; (iii) white light illuminating the rear or side registration number plate; (iv) white light used while reversing; (v) light provided for illuminating the implement's working area on the ground in off-highway or construction operations.] 244[109. Parking

construction equipment vehicle and every motor vehicle 246 * * other than]]] motor cycles and three-wheeled invalid carriages shall be provided with one white or amber parking light on each side in the front. In addition to the front lights, two red parking lights one on each side in the rear shall be provided. The front and rear parking lights shall remain lit even when the vehicle is kept stationary on the road: Provided that these rear lamps can be the same as the rear lamps referred to in rule 1 05, sub-rule 247 * * * 248[Provided also that construction equipment vehicle, which are installed with flood light lamps or spot lights at the front, rear or side of the vehicle for their off-highway or construction operations, shall have separate control for such lamps or lights and these shall be permanently switched off when the vehicle is travelling on the road.] 244 Inserted by G.S.R. 642(E), dated 28-7-2000 (w.e.f. 28-7-2000). 245 Substituted by G.S.R. 642(E), dated 28-7-2000 (w.e.f. 28-7-2000) 246 The words "three wheelers of engine capacity not exceeding 500 cc" omitted by G.S.R. 589(E), dated 16-9-2005 (w.e.f. 1-4-2006). 247 Proviso omitted by G.S.R. Ill (E), dated 10-2-2004 (w.e.f. 10-8-2004). 248 Substituted by G.S.R. 338(E), dated 26-3-1993 (w.e.f. 26-3-1993). 94 249 250[Lamps on three-wheelers].—Every 251 [three-wheeler] shall be fitted with one front head lamp and 63[two side white or amber lights] or two front lamps on the body. In addition to the front lamp or side lights, it shall be fitted with 252[two rear lamps showing to the rear red light] visible from a distance of 75 metres and a white light illuminating the registration mark exhibited on the rear of the vehicle so as to render it legible from a distance of 15 metres; and also two red reflex reflectors each having a reflecting area of not less than seven square centimetres: Provided in case where these vehicles are attached with trailers, the rear fitments mentioned in this rule and direction indicator system mentioned in rule 102 shall also be provided at the rear of the trailer:] 253[Provided further that fitment of one head lamp shall be applicable only in case of three-wheelers with overall width not exceeding 1400 mm and in such cases the side lights shall be amber in colour.] 111. Prohibition of spot lights, etc.—No spot light or search light shall be carried on the front of any vehicle except in exceptional circumstances with the prior approval of the registering authority. Smoke, vapour, spark, ashes, grit and oil 112. Exhaust gases.—Every motor vehicle shall be so constructed or equipped that the exhaust gases from the engine are discharged neither downward nor to the left side of the vehicle and shall be so fitted as to allow the gases to escape to the right side or rear of the vehicle: Provided that in the case of tankers carrying explosives and inflammable goods, the fitment of exhaust pipe shall be according to the specification of the Inspector of Explosives: 254[Provided further that in the vehicles where the exhaust gases are discharged to the right of the vehicle, slight downward angle shall be permitted, provided the exhaust gases do not kick up any dust when the vehicle is stationary and engine running and in any case the angle of the pipe to the horizontal should not be more than 30 degrees: 249 Substituted by G.S.R. 338(E), dated 26-3-1993 (w.e.f. 26-3-1993). 250 Substituted by G.S.R. 589(E), dated 16-9-2005, for "Lamp on auto-rickshaws and three- wheelers with engine capacity not exceeding 500 cc" (w.e.f. 1-4-2006). 251 Substituted by G.S.R. 589(E), dated 16-9-2005, for "auto-rickshaw and three-wheeler of engine capacity not exceeding 500 cc" (w.e.f. 1-4-2006). 252 Substituted by G.S.R. 21 4(E), dated 18-3-1999 (w.e.f. 18-3-1999). 253 Proviso inserted by G.S.R. 589(E), dated 16-9-2005 (w.e.f. 1-4-2006). 254 Substituted by G.S.R. 338(E), dated 26-3-1993 (w.e.f. 26-3-1993). 95 Provided also that where the exhaust gases are discharged to the left of the vehicle the inclination of exhaust pipe should not cross 30 degrees in downward and 30 degrees in left direction against the vertical plane which includes the vehicle centre line, provided the exhaust gases do not take up any dust when the vehicle is stationary and engine running: 255[Provided further that in the case of agricultural tractors, vertical or horizontal] exhaust pipe may be provided and outlet of this pipe should be so directed that the driver of the tractor is not exposed to exhaust gases by locating the outlet over or to the side of head- level of the driver as per Indian Standards IS: 12239 (Part 1) —1988:] 256[Provided also that in the case of construction equipment vehicle vertical exhaust pipe may be fitted and outlet of this pipe shall be so directed that the driver of the vehicle is not exposed to exhaust gases.] 113. Location of exhaust pipes.—On and from the date of commencement of this sub- 257 [no exhaust pipe of a motor vehicle including construction equipment vehicle] shall be located within a distance of 35 millimeters from the fuel line connecting to the fuel tank and engine

114. Exhaust pipes of public service vehicles.—The exhaust pipe of every public service vehicle shall be so fitted or shielded that no inflammable material is thrown upon it from any other part of the vehicle and that it is not likely to cause a fire through proximity to any inflammable material on the vehicle. Emission of smoke, vapour, etc., from motor vehicles 115. Emission of smoke, vapour, etc. from motor vehicles.—

Every motor vehicle other than motor cycles of engine capacity not exceeding 70 cc, manufactured prior to the first day of March 1990, shall be maintained in such condition and shall be so driven so as to comply with the standards prescribed in these rules.] On and after 1st October, 2004, every motor vehicle operating on— (i) Petrol/CNG/LPG shall comply with the idling emission standards for Carbon monoxide (CO) and Hydrocarbon (HC) given in the Table below:— 255 Substituted by G.S.R. 111 (E), dated 10-2-2004, for "Provided further that in the case of tractors, vertical" (w.e.f. 10-8-2004). 256 Inserted by G.S.R. 642(E), dated 28-7-2000 (w.e.f. 28-7-2000). 257 Substituted by G.S.R. 1 16(E), dated 27-2-2002, for "no exhaust pipe" (w.e.f. 27-8-2002). 258 Substituted by G.S.R. 338(E), dated 26-3-1993 (w.e.f. 26-3-1993). 259 Sub-R. (2) substituted by G.S.R. 11 1 (E), dated 10-2-2004 (w.e.f. 10-8-2004) and as corrected by vide G.S.R. 176(E), dated 5-3-2004 96 TABLE PETROL/CNG/LPG DRIVEN VEHICLES 2. 3. 4

5. Vehicle Type 2 and 3-Wheelers (2/4-stroke) (Vehicles manufactured on and before 31 st March, 2000) 2 and 3-Wheelers (2-stroke) (Vehicles manufactured after 31 st March, 2000) 2 and 3-Wheelers (4-stroke) (Vehicles manufactured after 31 st March, 2000) Bharat Stage 11 compliant 4-wheelers 4-Wheelers other than Bharat Stage 11 compliant 4.5 3.5 3.5 0.5 3.0 *HC(n-hexane equivalent) ppm 9000 6000 4500 750 1 500 Note.—The test shall be carried out using the instrument type approved as per rule 1 16(3) of the Central Motor Vehicles Rules, 1989 (CMVR) with the vehicle engine wanned up after a run of minimum 15 minutes on a variable course under normal traffic condition. During the test the vehicle engine shall be running at idling speed and the sampling probe shall be inserted into the vehicle exhaust system to a depth not less than 300mm. In case CO and/or HC emission values recorded during the test are not within the limits, the testing shall be discontinued and the vehicle owner shall be advised to resubmit the vehicle after repair/service. The idling emission standards for vehicles when operating on Compressed Natural Gas (CNG), shall contain Non-Methane Hydrocarbon (NMHC) in place of Hydrocarbon (HC) and shall be estimated by the following formula: NMH00.3xHC Where HC= Total Hydrocarbon measured as n-hexane equivalent. Similarly idling emission standards for vehicles when operating on Liquefied Petroleum Gas (LPG) shall contain Reactive Hydroharbon (RHC) in place of Hydrocarbon (HC) and shall be estimated by the following formula: RHC=O.5 x HC Where HC= Total Hydrocarbon measured as n-hexane equivalent: Provided that in case of Petrol vehicles fitted with three-way closed loop catalytic converters operating in a specific city or area, the Government of the respective State or Union Territory Administration, as the case may be, may, by notification in the Official Gazette, specify the introduction of measurement of LAMBDA (dimensionless value 97 representing burning efficiency of an engine in terms of the air/fuel ratio in the exhaust gases) and tighter emission norms for in-use vehicles with such periodicity as may be warranted, after ensuring that gas analyzers capable of measuring the values, duly approved by the testing agencies, are available in such city or area, as the case may be: Provided further that testing procedures are prescribed in TAP documents Nos. 1 15 and 1 16 as amended from time to time: Provided also that the compliance to the limits prescribed in the above proviso shall be included in the certificate issued by the vehicle manufacturer in

Form 22 or Form 22-A, as applicable for the vehicle manufactured on or after 1st October, 2004. (ii) Smoke density for all diesel-driven vehicles shall be as follows:— Method of Test Free acceleration test for turbo charged engine and naturally aspirated engine TABLE DIESEL VEHICLES Maximum Smoke Density Light absorption coefficient 2.45 Mar tidge units 65 The free acceleration test shall be carried out using the instrument type approved as per CMVR 116(3) with the vehicle engine wanned up to attain oil temperature of minimum 60 oc. During each free acceleration, maximum no load speed reached shall be within bandwidth of ±500 rpm of the average value in respect of 3-wheeler vehicles and ±300 rpm of the average value for all other categories of vehicles. The free acceleration test shall be repeated till the peak smoke density values recorded in four successive accelerations meeting the above maximum no load rpm criteria are situated within a bandwidth of 25% of the arithmetic mean (in m-1 unit) of these values or within a bandwidth 0.25 K, whichever is higher and do not form a decreasing sequence. The smoke density to be recorded shall be arithmetic mean of these four readings. In case the valid readings are not obtained within 10 free accelerations or the smoke . density recorded is not within the limits, the testing shall be discontinued and the vehicle owner shall be advised to resubmit the vehicle after repair/ service.] (3) On and from the date260 of commencement of this sub-rule, all petrol-driven vehicles shall be so manufactured that they comply with the mass emission standards as specified at Annexure l. The breakdown of the operating cycle used for the test shall be 260 Brought into force on 1st day of April, 1991 vide S.O.869(E), dated 27-10-1989. 98 as specified at Annexure 11, and the reference fuel for all such tests shall be specified in Annexure Ill to these rules. (4) On and from the date261 of commencement of this sub-rule, all diesel-driven vehicles shall be so manufactured that they comply with the standards based on exhaust gas opacity as specified at Annexure IV to these rules. (5) On and from the date262 of commencement of this sub-rule, all petrol-driven vehicles shall be so manufactured that they comply with the following levels of emissions 263[when tested as per test cycle specified in Annexure V]:— Mass of Carbon Monoxide Mass of Hydrocarbons (CO) (HQ Maximum grams per KWIT Maximum grams per KWH 14 3.5 Mass of Nitrogen Oxides (NO) Maximum grams per KWH 18 264[Provided the standards for exhaust gas emissions applicable to agricultural tractors shall be notified separately.] (6) Each motor vehicle manufactured on and after the dates specified in sub-rule (2), (3), (4) or (5), shall be certified by the manufacturers to be conforming to the standards specified in the said sub-sections, and further certify that the components liable to effect the emission of gaseous pollutants are so designed, constructed and assembled as to enable the vehicle, in normal use, despite the vibration to which it may be subjected, to comply with the provisions of the said sub-rule. After the expiry of a period of one year from the date on which the motor vehicle was first registered, every such vehicle shall carry a valid "Pollution under control" certificate issued by an agency authorised for this purpose by the State Government. The validity of the certificate shall be for 266[six months] and the certificate shall always be carried in the vehicle and produced on demand by the officers referred to in sub-rule (1) of rule 116. (8) The certificate issued under sub-rule (7) shall, while it remains effective, be valid throughout India.] 261 262 263 264 265 266 Brought into force on 1st day of April, 1991 vide S.O.869(E), dated 27-10-1989. Brought into force on 1st day of April, 1992 videS.0.869(E), dated 27-10-1989. Substituted by G.S.R. 338(E), dated 26-3-1993 (w.e.f. 26-3-1993). Inserted by G.S.R 338(E), dated 26-3-1993 (w.e.f. 26-3-1993). Added by G.S.R. 338(E), dated 26-3-1993 (w.e.f. 26-3-1993). Substituted by G.S.R 1 1 1 (E), dated 10-2-2004, for "six months or any lesser period as may be specified by die State Government from time to time" (w.e.f. 10-8-2004). 99 267 [(9) Mass emission standard for diesel vehicles Type approval tests g/KM Vehicle Category Medium & Heavy over 3.5 Ton/GVW Light diesel upto 3.5 Ton/GVW or Reference mass R(Kg) R<1020 1470 1700 R<2150 Note: NOx (g/KWH) 14.4 14.4 HC+NOx g/KM 2.0 2.2 2.5 2.7 2.9 3.5 4.0 Smoke (g/KWH) 2.4 2.4 5.0 5.7 6.4 7.0 7.7 8.2 9.0 (g/KWH) 11.2 11.2 *The test cycle is as per 13 mode cycle on dynamometer. * The test should be as per Indian driving cycle with cold start. *** The emissions of visible pollutants (smoke) shall not exceed the limit value to smoke density. When expressed as light absorption coefficient given below for various nominal flows when tested as constant speeds over full load. (As indicated at Annexure l). COP STANDARDS *10% relaxation in the standards for HC, CO and NOx would be given. ** 10% relaxation in the standards for CO and combined HC+NOx would be given. 268[Mass emission standard for petrol-driven vehicles—Effective from 1st April, 1 998 (i) Passenger Cars— Cubic Capacity 3 <1400 >2000 Type approval tests Carbon Monoxide (gm/km) Passenger cars Passenger cars HC+NOx (gm/km) Passenger Passenger cars fitted cars not fitted With catalytic with

catalytic fitted with catalytic converter 4.34 5.60 6.20 not fitted with catalytic converter 8.68 12.40 converter I .50 I .92 2.18 converter 3.00 3.84 4.36 267 Substituted by G.S.R. 163(E), dated 29-3-1996 (w.e.f. 1-4-1996). Earlier sub-R. (9) was added b! G.S.R. 609(E), dated 15-9-1993 (w.e.f. 15-9-1993). 2 8 Substituted by G.S.R. 46(E), dated 21-1-1998 (w.e.f. 1-4-1998). 100 Notes.—l. The tests will be as per Indian driving cycle with warm start. However, with effect from 1st April, 1998, the test will be as per Indian driving cycle with cold start for catalytic converter fitted vehicles as:— Soak Temperature Soak Period Preparatory running before sampling Number of test cycles Break down of cycles 200-300 6.30 hrs 4 cycles 6 Indian driving cycle as per Annexure 11 2. For passenger cars not fitted with catalytic converters, the test will continue to be with warm start as per existing procedure, till 1-4-2000

3. There should be no crankcase emission

4. Evaporative emission should not be more than 2.0g/test

5. COP standards: 20% relaxation in the standards for Carbon Monoxide and combined ITC + NOx would be given

6. For vehicles fitted with catalytic converter a deterioration factor of 1.2 on Type- Approval Limits will be applicable for durability.] (ii) Three- Wheelers (for all categories* co HC + NOx Note: gms/km gms/km 6.75 5.40 1 . The test will be as per Indian driving cycle with warm start. However, with effect from 1st April, 1998, the test will be as per Indian driving cycle with cold start

2. COP standards: 20% relaxation in the standards for Carbon Monoxide and combined HC + NOx would be given.(iii) Two-Wheelers (for all categories)— co HC + NOx Note: gms/Km gms/Km 4.50 3.60 1 . The test will be as per Indian driving cycle with warm start. However, with effect from 1st April, 1998, the test will be as per Indian driving cycle with cold start

2. COP standards: 20% relaxation in the standards for Carbon Monoxide and combined HC+NOx would be given.101 Nominal Flow G(I/2) 42 45 50 55 60 65 70 75 80 85 90 95 IOO 105 110 115 269 270 [(10) Mass 1999 in case of April, 2000] ANNEXURE I Light Absorption (K(l/m)) 2.26 2.19 2.08 I .985 I .90 1 .84 I .775 I .72 I .665 I .62 I .575 I .535 I .495 I .465 I .425 I .395 Nominal Flow G(I/2) 120 125 130 135 1 40 145 150 160 165 170 175 180 185 190 195 200 Light Absorption (K(l/m)) I .37 I .345 I .32 I .30 I .27 I .25 1 205 1.19 1.17 1.14 1.11 1 095 I .08 I .065] Emission Standards for vehicles manufactured on and after 1st June, National Capital Region of Delhi and in other cases on and after 1st A. For Petrol-Driven Vehicles (1) Passenger Cars Type Approval Conformity of Production CO(g/km) 2.72 3.16 HC+NOx(g/km) 0.97 1,13 Notes.—The test shall be as per the modified Indian driving cycle, with cold start, as specified in Annexure IV-B, on Chassis Dynamometer. There should be no crankcase emission. Evaporative emission should not be more than 2.0g/test. For vehicles fitted with catalytic converter, a deterioration factor of 1.2 on Type Approval Limits will be applicable for durability. Commercial fuel shall be as notified by the Ministry of Environment and Forests vide Notification No. G.S.R. 176(E), dated the 2nd April, 1996. Reference test fuel shall be as specified in Annexure IV-C. 2-Whee1ers and 3-Whee1ers T e A roval Conformity of Production CO(g/km) HC+NOx(g/km) 2-Whee1er 2.0 2.4 3-Whee1er 4.0 4.8 2-Whee1er 2.0 2.4 3-Whee1er 2.0 2.4 269 Sub-R (10) inserted by G.S.R. 493(E), dated 28-8-1997 (w.e.f. 1-4-2000). 270 Substituted by G.S.R. 399(E), dated 1-6-1999, for "10. Mass Emission Standards for vehicles manufactured on and after 1st April, 2000" (w.e.f. 1-6-1999). 102 Notes.—The test shall be as per the Indian driving cycle, with cold start, on Chassis Dynamometer as specified in Annexure IV-B to the principal rules. Commercial fuel shall be as notified by the Ministry of Environment and Forests vide Notification No. G.S.R. 176(E), dated the 2nd April, 1996. Reference test fuel shall be as specified in Annexure FV-C. 271 [For 2-wheelers and 3-wheelers fitted with catalytic converter, a deterioration factor of 1.2 on Type Approval Limits, will be applicable for durability: Provided that the vehicle manufacturers may opt for an ageing test of 30,000 kms for evaluating deterioration factor, as per procedure that may be laid down by the Central Government.] B. For Diesel Vehicles (Including Two and Three-Wheelers) l. Vehicles with GVW exceeding 3.5 ton Pollutants CCX g/KWn HCfe/kWh NOxfe/kWh FM(g/k Wh) for engines with power exceeding 85kW PM(g/k Wh) or engines with power not exceeding 85k W Type Approval 4.5 1.1 8.0 0.36 0.36 11. Vehicles with G VW equal to or less than 3.5 ton Limits for Conformity of Production 4.9 I .23 9.0 0.4 0.4 Limits for Pollutants g/kWh) HC(g/kWh) NOx (g/kWh) PM(g/k Wh) for engines with power exceed ing 85kW PM(g/ k Wh) for engines with power equal to or Type Approval Conformity of Production 4.5 8.0 0.36 0.61 4.9 I .23 9.0 0.4 0.68 less than 85kW

Reference Mass (kg) R<1250 1700<R Or Chassis Dynamometer Test Limits for Type Approval m/km co 2.72 5.17 6.90 Limits for conformity of Production m/km HC+NOx 0.97 1 .40 I .70 0.14 0.19 0.25 co 3.16 6.0 8.0 HC+NOx 1.13 I .60 2.0 0.18 0.22 0.29 Notes.—The test for vehicles with GVW equal to or less than 3.5 ton shall be as per the 13 mode cycle on engine dynamometer specified in Annexure IV-A to the principal rules. 271 Inserted by G.S.R. 400(E), dated 31-5-2002 (w.e.f. 31-5-2002). 103 The test shall be as per the Indian driving cycle, for 2-Wheelers and 3-Wheelers and modified Indian driving cycle for 4-Wheelers with cold start, as specified in Annexure IV- B on Chassis Dynamometer. For vehicles fitted with catalytic converters a deterioration factor 1.1 of CO; 1.0 for HC+NOx and 1.2 for PM on type approval limits will be applicable for durability. The emission of visible pollutants (smoke) shall not exceed the limit value to smoke density, when expressed as light absorption co-efficient for various nominal flows as in Annexure I to rule 115(9), (Notification No. G.S.R. 163(E), dated 29th March, 1996), when tested at constant speeds over full load. These smoke limits are without correction factor and engines are to be tested with conditioned air supplied to the engine to maintain atmospheric factor of 0.98 to 1.02. Commercial fuel shall be as notified by the Ministry of Environment and Forests vide Notification No. G.S.R. 176(E), dated the 2nd April, 1996. Reference test fuel shall be as specified in Annexure IV-D.] 272For 2-wheelers and 3-wheelers fitted with catalytic converter, the deterioration factor shall be as follows: 1.1; HC + NOx = 1.0; Provided that the vehicle manufacturers may opt for an ageing test of 30,000 kms lor evaluating deterioration factor, as per procedure that may be laid down by the Central Government: Provided further that the above provisions shall come into force after six months from the publication of the notification.] 1) Mass Emission Standards (Bharat Stage 11):— (A) Motor Cars with seating capacity of and up to 6 persons (including driver) and Gross Vehicle Mass (GVM) not exceeding 2500 kg. Standards (Type Approval=COP)(g/km) Vehicles with Gasoline engine Diesel engine B) Four-Wheeler designed to carry exceeds 2500 kg. co 2.2 1.0 (HC+NOx) 0.5 0.7 0.08 Passenger Vehicles with GVW equal to or less than 3500 kg and more than 6 persons (including driver) or maximum mass of which 272 Inserted by G.S.R. 400(E), dated 31-5-2002 (w.e. f. 31 -5-2002). 273 Inserted by G.S.R. 77(E), dated 31-1-2000. Brought into force in the National Capital Region w.e.f. 1-4-2000 vide G.S.R. 77(E), dated 31-1-2000, in Mumbai (including Greater Mumbai) w.e.f. 1-1-2001 and in Calcutta and Chennai w.e.f. 1-7-2001 vide G.S.R. 779(E), dated 29-8-2000. 104 Class 11 Notes:— Ref. Mass(rw) kg rw<1250 1700<rw Limit Values for Type Approval (T A) as well as COP Mass of C O(g/km) Mass of HC+NOx(g/km) Mass of PM(g/km) Case line 2.2 4.0 5.0 Diesel 1.0 I .25 1.5 Gasoline Diesel 0.5 0.6 0.7 0.7 1.0 1.2 Diesel 0.08 0.12 0.17 1. The test including driving cycle shall be as per sub-rule (1 0), with the modifications (i) there shall be no relaxation of norms for COP purposes, (ii) the tests shall be on Chassis dynamometer, (iii) the driving cycle shall be at a maximum speed of 90 kmph, and (iv) the reference fuel shall be of a maximum of 0.05% sulphur content

2. Commercial fuel for meeting above norms shall be upto 0.05% mass maximum sulphur content

3. There shall be no crankcase emissions for petrol-driven vehicles

4. Evaporative emission shall not be more than 2.0g/ test from petrol-driven vehicles

5. For the above vehicles when fitted with catalytic converter deterioration factor shall be as follows:—Gasoline engines: CO=I .2; (HC+NOx)=l .2; Diesel engines: co=l.l; .O; PM=1 2: Provided that the vehicle manufacturers may opt for an ageing test of 80,000 kms for evaluating deterioration factor, as per procedure that may be laid down by the Central Government

6. For diesel engine vehicles, the emission of visible pollutants (smoke) shall not exceed the limit value to smoke density, when expressed as light absorption coefficient for various nominal flows as in Annexure I to rule 115(9) when tested at constant speeds over full load.] Four-Wheeled Vehicles (other than passenger vehicles) with GVW equal to or less than 3500 kg shall conform the following norms:— 274 Inserted by G.S.R. 286(E), dated 24-4-2001 published in the Gazette of India, dated 24-4-2001, Ext., Pt. 11, S. 3(z), Sl. No

198. In the National Capital Territory of Delhi in respect of Vehicles manufactured on or after six months from the date of publication in 105 Engine Dynamometer Test Limit Values for Type Approval (T A) as well as (COP) CO(g/kWh) HC (g/kWh) 1.1 NOx (g/kWh) 7.0 PM (g/kWh) 0.15 4.0 Class 1 11 111 Notes: Or Chassis Dynamometer Test Mass of CO (g/km) Mass of HC+NQx (g/km) Ref. Mass (RM) Kg RM < 1250 1250 1700 1700 < RM Gasoline 2.2 4.0 5.0 Diesel 1.0 1.25 1.5 Gasoline 0.5

0.6 0.7 Diesel 0.7 1.0 1.2 Mass of PM(g/km) 0.08 0.12 0.17 1. (a) There shall be no relaxation for COP purposes. (b) The tests shall be carried out on the engine dynamometer operation as specified in Annexure IV-A of the rules. The tests on Chassis dynamometer shall be as per the driving cycle given in Note of clause (B) of sub-rule (11) of rule 115. (c) The reference fuel shall be of a maximum of 0.05% mass sulphur content

2. Commercial fuel for meeting above norms shall be up to 0.05% maximum mass sulphur content

3. For diesel engine vehicles the emission of visible pollutants (smoke) shall not exceed the limit value to smoke density, when expressed as light absorption coefficient for various nominal flows as in Annexure I to sub-rule (9) of rule 115 when tested at constant speeds over full load. These smoke limits are without correction factor and engines are to be tested with conditioned air supplied to the engine to maintain atmospheric factor of 0.98 to 1.02

4. For diesel engined vehicles, the free acceleration smoke for naturally aspirated and turbo-charged engines shall not exceed the smoke density limit value as in clause (c) of sub-rule (2) of rule 115.the Official Gazette, i.e., 24-4-2001 and in respect of the "Four-Wheeled Transport Vehicles" which are plying on Inter-State Permits or on National Permits or on All India Tourist Permits within the jurisdiction of National Capital Territory of Delhi, and in respect of any Vehicles in other areas of country, from such date as the Central Government may, by notification appoint in the Official Gazette, and different dates may be appointed for different areas. 106

5. There shall be no crankcase emissions for petrol engined vehicles

6. Evaporative emission shall not be more than 2.0g/test from petrol engined vehicles. (D) Vehicles with GVW exceeding 3500kg shall conform the following norms:— Limit Values for Type Approval (T A) as well as (COP) CO(g/kWh) 4.0 Notes: HC(g/kWh) 1.1 NOx(g/kWh) 7.0 PM(g/kWh) 0.15 1. (a) There shall be no relaxation for COP purposes. (b) The tests shall be carried out on the engine dynamometer operation as specified in Annexure IV-A of the rules. (c) The reference fuel shall be of a maximum of 0.05% mass sulphur content

2. Commercial fuel for meeting above norms shall be up to 0.05% mass maximum sulphur content

3. For diesel engined vehicles, the emission of visible pollutants (smoke) shall not exceed the limit value to smoke density, when expressed as light absorption coefficient for various nominal flow as in Annexure I to sub-rule (9) of rule 115 when tested at constant speeds over full load. These smoke limits are without correction factor and engines are to be tested with conditioned air supplied to the engine to maintain atmospheric factor of 0.98 to 1.02

4. For diesel engined vehicles, the free acceleration smoke for naturally aspirated and turbo-charged engines shall not exceed the smoke density limit value as in clause (c) of sub-rule (2) of rule 115.] Mass emission standards (Bharat Stage 11) for two-wheeler and three-wheeler manufactured on and from 1st April, 2005 shall be as follows, namely:— TABLE Vehicle Category (1) Two-wheeler (Petrol) Three-wheeler (Petrol) Two-wheeler and three- wheeler (Diesel) Pollutants (2) co HC+NOx co HC+NOx co HC+NOx TA=COP norms g/km TA = COP D.F. (3) 1.50 1.50 2.25 2.00 1.00 0.85 0.10 (4) 1.2 1.2 1.2 1.2 1.1 1.0 1.2 Deterioration Factor, see para (c) below. 275 Inserted by G.S.R. 720(E), dated 10-9-2003. 107 (a) The test shall be as per the Indian Driving Cycle with cold start on chassis dynamometer as specified in the Table given below by testing agencies, namely:— Test Cell Conditions (1) Soak Temperature Soak period Preparatory running before sampling No. of test cycles Breakdown of cycles TABLE Petrol two-wheeler and three- wheeler (2) 20-300 c 6-30 hours Idling of 40 seconds and 4 cycles 6 Indian Driving Cycle as per Annexure 11 to principal rule Diesel two-wheeler ajid three- wheeler (3) 20-300 c 6-30 hours Idling of 40 seconds 6 Indian Driving Cycle as per Annexure 11 to principal rule (b) Reference fuel for testing shall be in line with that in the ECE; (c)(i) For all types of two-wheeler and three-wheeler petrol vehicles, a deterioration factor as specified in column (4) in the Table in this sub-rule shall be applicable for durability: Provided that the vehicle manufacturer may opt for an ageing test of 30,000 kms for evaluating deterioration factor, as per procedure that may be laid down by the Central Government from time to time; (ii) For all types of two-wheeler and three-wheeler diesel vehicles, a deterioration factor as specified in column (4) in the Table in this sub-rule shall be applicable for durability: Provided that the vehicle manufacturer may opt for an ageing test of 30,000 kms for evaluating deterioration factor, as per procedure that may be laid down by the Central Government from time to time; (d) For diesel engine

vehicles, the emission of visible pollutants (smoke) shall not exceed the limit value to smoke density, when expressed as light absorption co-efficient for various nominal flow as indicated in Annexure I to sub-rule (9) of rule 115 when tested at constant speed over full load; (e) COP frequency and samples:— No. (1) 1. 2. 3. 4

5. Type of Vehicle (2) Two-wheeler and three- wheeler Two-wheeler Two-wheeler Three-wheeler Three-wheeler Annual Production Exceedin (3) 250 per 6 months 100000 per year 150000 er 6 months 10000 er ear 75000 per 6 months 108 U to (4) 10000 per year 150000 per 6 months 75000 er 6 months COP Frequency (5) Once every year Once every 6 months Once ever 3 months Once ever 6 months Once every 3 months For production volumes of less than 250 per 6 months the method as prescribed in the proviso to rule 126-A shall apply; (f) Testing procedures shall be in accordance with the reference document MOST/CMVR/TAP-115/116 as amended from time to time by the Government of India in the Ministry of Road Transport and Highways:] 276[Provided that Mass Emission Standards (Bharat Stage 11) for diesel driven two- wheeler and three-wheeler shall come into force on the dates specified against each of the States in Table below:—TABLE State (2) 2. 3. 4. 5. 6

7. Rajasthan Uttar Pradesh—Mathura, Kannauj, Muzaffarnagar, Aligarh, Farukkabad, Saharanpur, Badaun, Barreily, Moradabad, Hathras, Rampur, Bijnor, Agra, Pilibhit, J.P. Nagar, Mainpuri, Lalitpur, Hardoi, Firozabad, Jhansi, Shahjahanpur, Eta wall, Jalon, Lakhirnpur Kheri, Etah, Mahoba and Sitapur Uttaranchal Madhya Pradesh Himachal Pradesh Jammu and Kashmir Punjab Date (3) 1st June, 2005 I st June, 2005 1st July, 2005 1st September, 2005 1st October, 2005 1st October, 2005 1st October, 2005.] 277 [(14) Mass Emission Standards (Bharat Stage Ill).—The Mass Emission Standards for Bharat Stage Ill shall be as under:— (A) Motor cars with seating capacity of and up to six persons (including driver) and Gross Vehicle Weight not exceeding 2500 kg. Vehicles with Gasoline Diesel engine Limit Values for Type Approval (T A) as well as COP (g/km) co 2.30 0.64 0.20 NOx 0.15 0.50 HC+NOx 0.56 0.05 276 Inserted by G.S.R. 1-4-2005(w.e.f. 1-4-2005). 277 Inserted by G.S.R. 686(E), dated 20-10-2004. Brought into force—(a) in the National Capital Region and the cities of Mumbai, Kolkata, Chennai, Bangalore, Hyderabad including Secundrabad, Ahmedabad, Pune, Surat, Kanpur and Agra in respect of four-wheeled vehicles manufactured on and from 1st April 2005, except in respect of four-wheeled transport vehicles plying on Inter-State Permits or National Permits or All India Tourist Permits within the jurisdiction of these cities; and (b) in other areas of the country, from such date as may be notified by the Central Government. Here "National Capital Region" shall have the same meaning as assigned to it in clause (l) of section 2 of the National Capital Region Planning Board Act, 1985 (2 of 1985). 109 (B) Four-Wheeler Passenger Vehicles with Gross Vehicle Weight equal to or less than 3500 kg and designed to carry more than six persons (including driver) or 3000 kg. and (C) Four-wheeled Vehicle (other than passenger vehicles) with Gross Vehicle Weight equal to or less than 3500 kg shall conform to the following norms:— Limit Values for Type Approval (T A) (g/km) as well as COP Class Ref. Mass co Gasoline 2.30 4.17 5.22 HC NOx HC+NOx Diesel 0.64 0.80 0.95 Gasoline Diesel Gasoline Diesel Gasoline Diesel 1 11 111 (rw) kg rw<1305 1305<w <1760 1760<rw 0.20 0.25 0.29 0.15 0.18 0.21 0.50 0.65 0.78 0.56 0.72 0.86 Diesel 0.05 0.07 0.10 13 In case of diesel vehicles, the engine power shall be measured on engine dynamometer and the measured power shall not differ from the specified power as given below: (i)For Type approval: ± 5% at maximum power point and ± 10% at other measurement points for single cylinder engines. ± 2% at maximum power point and + 6 „ and -2% at other measurement points for all other engines. (ii) Testing procedures shall be in accordance with Chapter 6 of Part IV of the reference document MOST/CMVR/TAP-115/116 as amended trom time to time by the Government of India in the Ministry of Shipping, Road Transport and Highways

14. The vehicles described in clauses (A), (B) and (C) of this sub-rule should comply with rule 115(2).(D) Diesel vehicles with GVW exceeding 3500 kg shall conform to the following norms:— Engine category Gasoline/Gas Engine Diesel Engine Deterioration factors co 1.2 1.1 HC 1.2 NOx 1.2 1.0 HC+NOx 1.0 1.2 In case of diesel vehicles, the engine power shall be measured on engine 11. dynamometer and the measured power shall not differ from the specified power as given below: (i) For Type approval: ±2% at maximum power point and +6% and -2% at other measurement points. (ii) For conformity of production: -50/0/+80/0 at maximum power point. 110 (iii) Testing procedures shall be in

accordance with Chapter 6 of Part TV of the reference document MOST/CMVR/TAP-115/116 as amended from time to time by the Government of India in the Ministry of Shipping, Road Transport and Highways

12. The vehicles mentioned in clause (D) shall also comply with rule 1 15(2).(E) Diesel vehicles with GVW exceeding 3500 kg. and fitted with advanced exhaust after treatment system including De-NOx catalyst and/or particulate trap shall additionally conform to the following norms:— Limit Values for Type Approval (T A) as well as (COP) Engine Transient cycle (ETC) CO(g/kWh) 5.45 HC (g/kWh) 0.78 NOx (g/kWh) 5.0 PM (g/kWh) 0.16/0.21' ' (1) For engines having swept volume of less than 0.75 litre per cylinder and a rated power speed of more than 3000 rpm. (2) For diesel engines only. Notes.— 1. The test shall be on engine dynamometer

2. There shall be no relaxation of norms for COP purposes

3. The gaseous and particulate emissions are to be determined on the ESC lest as described in EEC document 1 999/96/EC

4. The smoke opacity is to be determined on the ELR test as described in EEC document 1999/96/EC

5. In case of vehicles operating on CNG or LPG mode all the provisions prescribed in rules 115-B and 115-C shall be respectively applicable, except that limiting value shall be as per clause (D) above

6. The reference fuel shall be as specified in Annexure IV-F, Annexure IV-II and Annexure rV-l for diesel, LPG and CNG, respectively

7. The Conformity of Production (COP) testing procedure shall be as described in section 9 of Annexure I of EEC Directive 88/77/EEC last amended by 1 999/96/EC

8. The COP frequency and samples:—(l) The COP period for each engine model including its variants shall be once in a year. (ii) For production volume of less than 250 for six months, the method as prescribed in the provisos to rule 126-A shall apply

9. For diesel engine vehicles, the emission of visible pollutants (smoke) shall not exceed the limit value of smoke density, as per Annexure I to rule 115(9). These smoke limits 111 are without correction factor and engines are to be tested with conditioned air supplied to the engine to maintain atmospheric factor of 0.98 to 1.02

10. The vehicles meeting the above norms shall use commercial fuel as per BIS specification IS: 1460-2000 (Amendment No.I—January, 2003) (Fourth Revision) for Diesel and IS:2796-2000 (Amendment No. ll—February, 2003) (Third Revision) for Gasoline. In case of diesel vehicles, the engine power shall be measured on engine 11. dynamometer and the measured power shall meet the requirements as given below: (i) For Type approval: ± 2% at maximum power point and +6% and -2% at other measurement points. (ii) For conformity of production: -50/0/+80/0 at maximum power point. (iii) Testing procedures shall be in accordance with Chapter 6 of Part IV of the reference document MOST/CMVR/TAP-115/116 as amended from time to time by the Government of India in the Ministry of Shipping, Road Transport and Highways

12. The vehicles mentioned in clause (E) shall also comply with rule 1 15(2).] 278[1 1 5-A. "[Emission of smoke and vapour from agricultural tractors, power tillers and construction equipment vehicles driven by diesel engines.—(l) Every A[agricultural tractor and construction equipment vehicle] manufactured on and from the date of commencement of this rule shall be maintained by its owner in such condition and shall be so used that visible and gaseous pollutants emitted by them comply with the standards as prescribed in this rule. (2) Every manufacturer of an 279[agricultural tractor and construction equipment vehicle] shall comply with the standards for visible pollutants, emitted by it, when tested as per the procedure described in Indian Standards IS: 12062:1987. (3) The emission of visible pollutants shall not exceed the limit values given below when tested on engine dynamometer at eighty per cent load at six equally spaced speeds, namely:— (a) Fifty-five per cent of rated speed declared by the manufacturer or one thousand r.p.m., whichever is higher; or (b) rated speed declared by the manufacturer. 278 Inserted by G.S.R. 627(E), dated 8-9-1999 (w.e.f. I-1 0-1999). 279 Substituted by G.S.R. 589(E), dated 16-9-2005, for the heading (w.e.f. 16-9-2005). 112 Light absorption coefficient (1m) 3.25 Maximum Smoke Density Hartridge units 75 93280 (4) Every diesel driven [construction equipment vehicles] shall be so manufactured and produced by its manufacturer that it complies with the following standards of gaseous pollutants, emitted by them in addition to those of visible pollutants as provided in sub-rule (2) when

tested as per the procedures described in ISO 8178-4 "Cl" 8 mode cycle, namely:— The weighted average Mass of Carbon Monoxide (CO), Hydrocarbons (HC) and Mass Oxides of Nitrogen (NOx) in gram or 281 [per] kilo watt. Irr. emitted during the test shall not exceed the limits given below, both for type approval and Conformity On Production tests, namely:— Mass of Carbon Monoxide (CO) Mass of Hydrocarbon (HC) Mass of Oxides of Nitrogen (NOx) 14.0 grain or [per] kilo watt. hr. 3.5 gram or [per] kilo watt. hr. 18.0 gram or [per] kilo watt, hr.] Every diesel driven agriculture tractor and power tiller shall be so manufactured and produced by the manufacturer that it complies with the following standards of gaseous pollutants emitted by them in addition to those of visible pollutants as provided in sub-rule (2) when tested as per the procedure prescribed in ISO 8178-4 "Cl" 8 mode cycle, namely:— The weighted average Mass of Carbon Monoxide (CO), Hydrocarbon (HC) and Oxides of Nitrogen (NOx) and Particulate Matter (PM) in gram per kilo watt hour emitted during the test shall not exceed the limits given below in the Table for Type Approval (T A) and Conformity of Production (COP) tests, namely:— (1) Mass of Carbon Monoxide Mass of H drocarbons (HC) Mass of Oxides of Nitrogen (NOx) Mass of Particulate Matter TABLE Bharat (Term) Stage 11 norms (2) TA=COP 9.0 15.0 1.0 Bharat (Term) Stage Ill norms (3) TA=COP 5.5 9.5 0.8] 280 Substituted by G.S.R. 83(E), dated 5-2-2003, for "agricultural tractor and construction equipment vehicle" (w.e.f. 1-6-2003). 281 Corrected by G.S.R. 800(E), dated 3-12-1999. 282 Sub-R. (5) substituted by G.S.R. 589(E), dated 16-9-2005 (w.e.f. 16-9-2005). 113 Notes. (l) The norms mentioned in column (2) of the said Table which are applicable for agricultural tractor with effect from the 1st day of June, 2003, shall be applicable for power tillers from the 1st day of October, 2006. (2) The norms mentioned in column (3) of the said Table shall be applicable for agricultural tractor with effect from the 1st day of October, 2005 and for power tillers from the 1st day of April, 2008.] 283[1 15-B. Mass emission standards for Compressed Natural Gas Driven Vehicles.— 284[Mass emission standards for vehicles when operating on Compressed Natural Gas (hereinafter in this rule referred to as "CNG") shall be the same as are applicable for gasoline vehicles with the exception that HC shall be replaced by Non-Methane Hydrocarbon (NMHC), where NMHC = 0.3 x HC] A. Original Equipment/Converted Gasoline Vehicles: (1) For gasoline vehicles with Original Equipment (hereinafter in this rule referred to as O.E.) In case of CNG fitments by vehicle manufacturers on new petrol vehicles, each model manufactured by vehicle manufacturers shall be type approved as per the prevailing mass emission norms as applicable for the category of new vehicles in respect of the place of its use;] Explanations.—ln the case of O.E. or conversion of "In-Use" Gasoline Vehicles,— (a) For the purposes of granting Type Approval to a CNG kit, the tests shall be carried out as per the Table below by the test agencies. Test (1) Mass emission tests TABLE Reference Document (2) MOST/CMVWTAP-115/116 and notifications issued by the Engine performance tests on engine Government of India in this respect IS: 14599-1999 dynamometer applicable for OE only Constant speed fuel consumption test IS: 11921, 1986 (for 4-wheelers) IS: 10944, 1983 (for mopeds) IS: 10881, 1984 (for motor cycles and scooters) (b) The test procedure and safety guidelines for CNG vehicles, kit components including installation thereof, shall be as per AIS 024, as amended from time to time, till such time as corresponding BIS specifications are notified. 283 R. 115-B substituted by G.S.R. 853(E) dated 19-11-2001 (w.e.f. 19-5-2002). 284 Substituted by G.S.R. 11 1 (E), dated 10-2-2004 (w.e.f. 10-8-2004). 285 Cl. (a) substituted by G.S.R. 589(E),dated 16-9-2005 (w.e.f. 16-9-2006). (c) For OE fitment and retrofitment on "in-use" vehicles, the responsibility to Type Approval shall be that of the vehicle manufacturer and kit manufacturer or supplier respectively. (d) The Type Approval of CNG kit for "retrofitment" shall be valid for three years from the date of issue of such approval and shall be renewable for three years at a time. (e) The retrofitment of CNG kits on in-use vehicles shall be carried out by workshops authorized by the kit manufacturer/supplier or vehicle manufacturers, as the case may be. (l) The test agency shall complete the test and give necessary certificate within a period of three months from the date of receiving the kits. (g) The kit manufacturer/supplier shall provide a layout plan for retrofitment of CNG kit in the respective models on which any approved kit is to be installed, to the test agency for vetting and approval. The retrofitment of the kit shall be on the basis of such approved layout plan only. Testing agencies will be required to indicate specifically, the models and their variants on which the certificate will be valid. B. O.E. CNG Vehicles/Converted Diesel Vehicle: (l) For O.E. CNG Dedicated Vehicle (including drive-away chassis) made by vehicle 287 [(a) In case of CNG fitments by vehicle manufacturers on new diesel manufacturers.— vehicles, each model manufactured by vehicle manufacturers shall be type approved as per the prevailing mass emission norms as applicable for the

category of new vehicles in respect of the place of its use;] (b) O.E. CNG engine approved for specific engine capacity can be installed on the base model and its variants complying with the requirements under these rules as applicable; (c) Tests for particulate matter and emission of visible pollutants (smoke) under these rules shall not be applicable; (d) Prevailing COP procedure will also be applicable. (11) For conversion by modification of engines of In-use Diesel Vehicles. — (A) Type approval for diesel vehicle retrofitted/modified for dedicated CNG operation shall be given for specific make and model of the vehicle, in view of major changes or modifications involved in the CNG kit and diesel engine depending upon make and model of the vehicle; 286 Item A, Cl. (Ill) omitted by G.S.R. 11 1 dated 10-2-2004 (w.e.f. 10-8-2004). 287 Cl. (a) substituted by G.S.R. 589(E), dated 16-9-2005 (w.e.f. 16-9-2006). 115 (b) CNG kit approved on the vehicle for specific engine capacity can be installed on the base model and its variants fitted with the same capacity engine; The in-use vehicles when converted to operate on CNG shall meet the type approval norms of diesel vehicles corresponding to the year of their manufacture subject to the following minimum norms:— (i) for the vehicles manufactured up to the 31st %day of March, 2000, the type approval norms equivalent to India-2000 (India Stage l) norms as applicable under these rules; (a) for the vehicles manufactured on and after the 1st day of April, 2000, the type approval norms as specified in the Bharat Stage 11 norms, till the validity of such Bharat Stage 11 norms; (iii) for the vehicles manufactured on and after the 1st day of April, 2005, the type approval norms as applicable subject to minimum of Bharat Stage Ill emission norms in case of four-wheelers and Bharat Stage 11 emission norms for two and three-wheelers till the validity of these norms;] (d) Vehicles offered for Type Approval to the testing agency referred in rule 126 of the Central Motor Vehicles Rules, 1989 shall have to comply with fitness requirement, as applicable under these rules; (e) Tests for particulate matter and emission of visible pollutants (smoke) under these rules shall not be applicable; (f) Separate Type Approval is required for mechanically controlled and electronically controlled diesel fuel injected vehicles when retrofitted/ modified for CNG operation. Explanations.—ln the case of O.E. or conversion of "In-Use" vehicles by modification— (a) for the purpose of granting Type Approval to the vehicle fitted with CNG engine (converted from diesel engine) as O.E., or conversion by modification of "In-Use" diesel vehicles, performance tests shall be carried out as per the Table given below by the test agencies, namely:— (v) (1) Electro Magnetic Interference (EMI) Range test of at least 250 km for buses Cooling Performance Constant speed fuel consumption (2) In accordance with notification issued under rule 124 of Central Motor Vehicles Rules, 1989 14557,1998 IS: 11921, 1986 (for 4-wheelers) IS: 10944, 1983 (for mopeds) IS: 10881, 1984 (for motor cycles and scooters) Explanation.— 288 Cl. (c) substituted byG.S.R 1 6-9-2005(w.e.f. 16-9-2006). 116 (a) Vehicles offered for Type Approval to the testing agency referred in rule 126 shall have to comply with fitness requirement, as applicable under these rules. (b) Test procedure and safety guidelines for such CNG vehicles, kit components including installation thereof shall be as per AIS 024, as amended from time to time, till such time as corresponding BIS specifications are notified. (c) The test agency shall complete the test and give necessary certificate within three months of the same being submitted for tests. (d) Testing agencies will be required to indicate specifically, the models and their variants on which the replacement of new engine will be valid. D. Applicable Emission Norms Category of Engines (i) Fitted in vehicles with CVW equal to or less than 3.5 ton (ii') Fitted in vehicles with CVW greater than Applicable Emission Norms •For gasoline vehicles converted to CNG, Prevailing gasoline engine norms for chassis dynamometer test •For diesel vehicles converted to CNG, prevailing diesel engine norms for chassis dynamometer lest Prevailing diesel engine emission norms based on 13-mode steady- state engine dynamometer test. E. CNG vehicle/s kit components including installation shall comply the Safety Checks as given in Annexure IX. F. Testing agencies shall issue every Type Approval certificate containing the "Safety and Procedural Requirements for Type Approval of CNG and LPC Operated Vehicles" for CNG vehicles and conversion kits, as mentioned in Annexure X. Note:— 1. For the purpose of these rules, "O.E. fitment" means the vehicles which are manufactured for CNG operation by the vehicle manufacturer prior to their first registration. 2. "Conversion of In-use Gasoline Vehicle" means a vehicle already registered as a gasoline vehicle and is subsequently converted for operation on CNG by fitting the conversion kit and carrying out the other necessary changes. 3. "O.E. CNG Dedicated Vehicles" means the vehicles which are manufactured for CNG operation by the vehicle manufacturer prior to their first registration. 4. "Converted diesel vehicle" means a vehicle already registered as a diesel vehicle and is subsequently converted for operation on CNG by modifying the diesel engine fitted on that

vehicle by fitting the conversion kit and carrying out the other necessary changes. 117 5. " Retro fitment" (or replacement) of diesel vehicle means a vehicle already registered as a diesel vehicle and is subsequently converted for operation on CNG fitting a new engine adapted to operate on CNG

6. The AIS or IS specifications may be amended from time to time.289[7. In case of conversion kits on in-use gasoline vehicles or converted diesel vehicles, the validity of the type approval certificate issued by the testing agencies shall cover vehicles manufactured between the year of manufacture of the vehicle, on which such kit has been tested and date of the validity of the applicable norms prescribed for such category of vehicles as per clause (a) of Item (11) of part A of rule 115-B. Testing agencies shall be required to indicate specifically the model and their variants for diesel vehicles and capacity range of gasoline vehicles on which the certificate shall be valid for conversion.] 290[1 15-C Mass emission standards for Liquefied Petroleum Gas (hereinafter in this rule 291 referred to as LPG), driven vehicles.— [(1) Mass emission standards for vehicles when operating on Liquefied Petroleum Gas (hereinafter in this rule referred to as "LPG") shall be same as are applicable for gasoline vehicles with the exception that HC shall be replaced by Reactive Hydrocarbon (RHC), where RHC=0.5 x HC] (2) For gasoline vehicles with Original Equipment (hereinafter in this rule referred to as O.E.) Fitment,— (a) In case of LPG fitment done by vehicle manufacturers on new petrol vehicles, each model made by vehicle manufacturer shall be as type approved as per prevailing type approval emission norms and these rules as applicable; (b) base model and variants of such vehicle shall conform to these rules as applicable and type approval emission norms in petrol mode as specified in these rules. In the case of LPG mode, it shall meet mass emission norms as specified in rule 115 only excluding crankcase and evaporative emission norms; (c) a vehicle base model and its variants fitted with petrol tank of capacity not exceeding 5 litres, 3 litres and 2 litres on 4-wheeler, 3-wheeler and 2-wheeler respectively, shall be exempted from mass emission tests, crankcase emission test and evaporative emission test in petrol mode as specified in these rules, but shall comply with other provisions of these rules as applicable; 289 Note 7 substituted by G.S.R. 589(E), dated 16-9-2005 (w.e.f. 16-9-2006). 290 Inserted by G.S.R. 284(E), dated 24-4-2001 (w.e.f. 24-5-2001). 291 Substituted by G.S.R. 11 1 (E), dated 10-2-2004 (w.e.f. 10-8-2004). 118 (d) such vehicle shall be capable of bi-fuel operation such as LPG and petrol; (e) prevalent Conformity of Production (hereinafter in this rule referred to as the COP) procedure shall also be applicable. (3) For in-use gasoline vehicles,— 292 [(a) On and after expiry of one year from the date of publication of the Central Motor Vehicles (Fifth Amendment) Rules, 2005 in the Official Gazette, the in-use vehicles fitted with LPG kits shall meet the type approval emission norms specified in these rules for gasoline vehicles as applicable to the corresponding year of manufacture of such vehicle, subject to the following minimum norms: (i) for the vehicles manufactured up to the 31st day of March, 2000, the type approval norms equivalent to India-2000 (India Stage l) norms as applicable under these rules; (ii) for the vehicles manufactured after the 1st day of April, 2000, the type approval norms as specified in the Bharat Stage 11 norms, till the validity of such Bharat Stage 11 norms; (iii) for the vehicles manufactured after the 1st day of April, 2005, the type approval norms as applicable subject to minimum of Bharat Stage Ill emission norms in case of four-wheelers and Bharat Stage 11 emission norms for two and Provided that in respect of vehicle model/conversion kits/engine replacements type approved and certified under rule 11 5-C prior to commencement of these rules (as per notification number G.S.R. 284(E), dated the 24th April, 2001), such certificates shall cease to be valid after one year from the date of publication of the Central Motor Vehicles (Fifth Amendment) Rules, 2005, in the Official Gazette notwithstanding the period of validity specified in such certificates. Such certificates need to be revalidated by testing agencies in terms of these rules: Provided further that respective kit manufacturer/retrofitter/converters shall be free to obtain from testing agencies type approval in terms of new rules even prior to commencement of these rules;] (h) for purposes of LPG kit approval, kit manufacturer or supplier shall obtain the certificate from any of the test agencies authorised under rule 126 based on capacity of vehicle, in the following manner, namely:— 292 Cl. (a) substituted by G.S.R. 589(E), dated 16-9-2005 (w.e.f. 16-9-2005). 119 (i) LPG kit for the vehicles shall be type approved for vehicles irrespective of make and model based on engine capacity in cubic cm. Such a kit shall be considered fit for retrofitment in any vehicle having engine capacity within a range of ± 25% tolerance; (ii) for carbureted and Multi-point fuel injection fitted vehicles, separate type approval shall be necessary. (4)(a) For the purpose of granting type approval to LPG kit the following performance tests shall be carried out by the test agencies:— (i) Mass emission tests. (ii) Engine performance tests. (iil) Constant speed fuel

consumption test; (b) the tests specified under sub-clause (it) of clause (a) shall be carried out either on engine dynamometer or chassis dynamometer as applicable under these rules. However, in case of vehicle above 100 HP the tests shall be only on engine dynamometer; (c) the safety checks for such kit components including installation shall be as per the norms and standards given in the Annexure VIII, apart from detailed test procedure or safety guidelines contained in AIS 025 DI, as approved by the Central Government from time to time; (d) for OE fitment and retro fitment on "in-use" vehicles, the responsibility of Type Approval shall be that of the vehicle manufacturer and kit manufacturer or supplier, respectively; (e) the Type Approval of LPG kit for retrofitment shall be valid for three years from the date of issue of such approval and shall be renewable for three years at a time; (f) the retrofitment of LPG kits on in-use vehicles, shall be carried out by workshops authorised by the kit manufacturer/kit supplier or vehicle manufacturers, as the case may (g) the test agency shall complete the test and give necessary certificate within a period of three months from the date of receiving the kits; (h) the kit supplier/manufacturer shall provide a layout plan for retrofitment of LPG kit in the respective models on which any approved kit is to be installed, to the test agency for vetting and approval. The retrofitment of the kit shall be on the basis of such approved layout plan only. 120 293 * * * Diesel Vehicles with Original Equipment fitment.— 295 In case of LPG fitments by vehicles manufacturers on new diesel vehicles, each model manufactured by vehicle manufacturers shall be type approved as per the prevailing mass emission norms as applicable for the category of new vehicles in respect of the place of its use;] (ii') O.E. fitment LPG engine approved for specific appropriate engine capacity can be installed on the vehicle base model and its variants complying with the other requirements under these rules as applicable; (iii) Tests for particulate matter and emission of visible pollutants (smoke) under these rules shall not be applicable; and (iv) Prevailing COP procedures shall also be applicable; (v) In case of limits for Hydrocarbons, the mass emission standards formula as specified in sub-rule (1) shall be applicable. Explanation.—ln the case of O.E. fitment vehicles:— (a) For the purpose of granting Type Approval to the vehicle manufactured by O.E., in addition to the tests as specified in Central Motor Vehicles Rules, 1989, following performance tests shall be carried out, as per the Table given below by the test agency, namely:— (l) Test (2) 2. 3. 4. 5. 6. 7. 293 294 295 Mass emission tests Engine performance tests Gradeability test Constant speed fuel consumption test Electro-Magnetic Interference (EMI) Range test of at least 250 km for buses. For other vehicle categories range test to be carried out and test results to be reported. Cooling performance TABLE Reference Document (as amended from time to time) (3) MOST/CMVR/TAP-115/116 and notification issued by the Government of India in this respect IS: 14599-1999 In accordance with notification issued under rule 124 of Central Motor Vehicles Rules, 1989 IS: 11921-1986 (for four-wheelers) IS: 10944-1983 (for mopeds) IS: 10881-1984 (for motor cycles and scooters) AIS 054 (for three-wheelers) In accordance with notification issued under rule 124 of Central Motor Vehicles Rules, 1989 AIS 055 IS:1 4557-1998 Sub-rule (5) omitted by G.S.R. 589(E),dated 16-9-2005 (w.e.f. 16-9-2005). Inserted by G.S.R 788(E), dated 27-11 -2002 (w.e.f. 2-6-2003). Cl. (i) substituted by G.S.R.589(E),dated 16-9-2005(w.e.f. 16-9-2006). 121 Note:—The mass emission tests shall be carried out either on engine dynamometer or chassis dynamometer, as applicable; (b) Test procedure and safety guidelines for LPG vehicles, kit components including installation thereof, shall be as per A IS 025, AIS 026, AIS 027 as amended from time to time, till such time as corresponding BIS specifications are notified and shall be as given in Annexure-Vlll in addition to the detailed procedure of Safety Checks contained in AIS 025, AIS 026, AIS 027; (c) For O.E. fitment manufactured vehicles, the responsibility of Type Approval shall be that of the vehicle manufacturer; (d) The test agency shall complete the test and give necessary certificate within a period of three months from the date of receiving the kits. Replacement of In-use Diesel Engine by new LPG Engine.—For type approval of in-use vehicle having diesel engine replaced by new Liquefied Petroleum Gas engine it shall meet the prevailing emission norms as applicable to the category of vehicles in respect of its place of use subject to the tests mentioned in the Table given below]:— Sl. No. (1) 1. 2. 3. 4. 5. 6

7. Test (2) Mass emission tests Engine performance tests Gradeability test Constant speed fuel consumption test Elecffo-Magnetic Interference (EMI) Range test of at least 250 km for buses. For other vehicle categories range test to be carried out and test results to be reported. Cooling performance TABLE Reference Document (as amended from time to time) (3) MCST/CMVR/TAP-115/116and notification issued by the Government of India in this respect IS: 14599-1999 In accordance with notification issued under rule 124 of Cenu•al Motor Vehicles Rules, 1989 IS: 11921-1986 (for four-

wheelers) IS: 10944-1983 (for mopeds) IS: 10881-1984 (for motor cycles and scooters) AIS 054 (for three-wheelers) In accordance with notification issued under rule 124 of Cenu•al Motor Vehicles Rules, 1989 AIS 055 IS: 14557-1998 Explanation.—(a) In case of in-use vehicles offered for Type Approval to the test agency referred to in rule 126, it shall have to comply with fitness requirement, as applicable under these rules and the said test agency may, if it thinks so, verify the same; 296 Sub-R. (7) substituted byG.S.R. 16-9-2005 (w.e.f. 16-9-2006). 122 (b) In case of non-transport vehicles offered for retrofitment as per the tests mentioned in the Table, it shall be the responsibility of the retrofitter to make necessary inspection/checks regarding fitness of the such vehicles as applicable under these rules: In the case of retrofitment of in-use transport vehicles offered for the tests mentioned in the Table, the certificate of fitness granted under section 56 of the Act, shall be essential before the vehicle is accepted for retro fitment/conversion; (c) Test procedure and safety guidelines for such LPG vehicles, kit components including installation thereof shall be as per AIS 025, as amended from time to time, till such time as corresponding BIS specifications are notified and shall be as given in Annexure VIII in addition to the detailed procedure or Safety checks contained in AIS 025; (d) The test agency shall complete the test and give necessary certificate within a period of three months from the date of the vehicle being submitted for tests; and (c) The test agency shall be required to indicate specifically, the models and their variants on which the replacement of new engine shall be valid. (8) Applicable emission norms.—The emission norms as mentioned in column (3) of the Table below excluding particulate matter shall be applicable to the corresponding categories of engines as mentioned against them in column (2) of the said Table. Sl. No. (1) 1

2. TABLE Category of Engines (2) Fitted in vehicles with G VW equal to or less than 3.5 ton Fitted in vehicles with G VW greater than 3.5 ton Applicable Emission Norms (3) • For gasoline vehicles converted to LPG, prevailing gasoline engine norms for chassis dynamometer test • For diesel vehicles converted to LPG, prevailing diesel engine norms for chassis dynamometer test • Prevailing diesel engine emission norms based on 13-mode steady-state engine dynamometer test (9) LPG vehicle/kit components including installation shall comply with the Safety Checks as given in Annexure VIII. (10) The test agency shall, in addition to the Type Approval Certificate, issue Safety and Procedural Requirements for Type Approval Certificate containing the Safety and Procedural Requirements for Type Approval oi CNG and LPG Operated Vehicles, for LPG vehicles and conversion kits, as mentioned in Annexure X. Note:—For the purposes of these rules,— 123 (1) "OE fitment" means the vehicle engines which are manufactured for LPG operation by the vehicle manufacturer prior to their first registration; (2) "Conversion of In-use gasoline vehicle" means a vehicle already registered as a gasoline vehicle and subsequently converted for operation on LPG by fitting the conversion kit and carrying out the other necessary changes; (3) "O.E. fitment LPG dedicated vehicle" means a vehicle which is manufactured for LPG operation by the vehicle manufacturer prior to their first registration; (4) "Type approval of In-use vehicle having diesel engine replaced by new LPG engine" means a vehicle already registered as a diesel vehicle and is subsequently converted for operation on LPG by fitting a new engine adapted for operation on LPG; (5) The AIS or IS specifications may be as amended and notified from time to time.] 297 [(6) In case of conversion kits on in-use gasoline vehicles or replacement of in-use diesel engines by new LPG engines, the validity of the type approval certificates issued by the testing agencies shall cover vehicles manufactured between the year of manufacture of the vehicle, on which such kit had been tested and the date of validity of the norms prescribed for such category of vehicles as per clause (a) of sub-rule (3) of rule 115-C. Testing agencies shall be required to indicate specifically, the model and their variants for diesel vehicles and capacity range of gasoline vehicles on which the certificate shall be valid for conversion.] 116. Test for smoke emission level and carbon monoxide level for motor vehicles.— Notwithstanding any tiling contained in sub-rule (7) of rule 115 any officer not below the rank of Sub-Inspector of Police or the Inspector of Motor Vehicles who has reason to believe that a motor vehicle is not complying with the provisions of sub-rule (2) or sub-rule (7) of rule 1 15, may, in writing, direct the driver or any person incharge of the vehicle to submit the vehicle for conducting the test to measure the standards of emission in any one of the authorized testing stations, and produce the certificate to an authority at the address mentioned in the written direction within 7 days from the date of conducting the check. (2) The driver or any person incharge of the vehicle shall upon such direction by the officer referred to in sub-rule (1) submit the vehicle for testing for compliance of the 297 Note 6 inserted by G.S.R. 589(E), dated 16-9-2005 (w.e.f. 16-

9-2006). 298 Substituted by G.S.R. 338(E), dated 26-3-1993(w.e.f. 26-3-1993). 124 299[sub-rule (2) and sub-rule (7) of rule 115], at any authorised testing provisions of station. (3) The measurement for compliance of the provisions of 16[sub-rule (2) and sub-rule (7) of rule 1 1 5] shall be done with a meter of the type approved by any agency referred to in rule 126 of the principal rules or by the National Environmental Engineering Research Institute, Nagpur-440 001 : Provided that such a testing agency shall follow ISO or ECE Standards and procedures for approval of measuring meters. (4) If the result of the tests indicate that the motor vehicle complies with the provisions of 16[sub-rule (2) and sub-rule (7) of rule 115], the driver or any person incharge of the vehicle shall produce the certificate to the authority specified in sub-rule (1) within the stipulated time-limit. (5) If the test results indicate that the motor vehicle does not comply with the provisions of the 16[sub-rule (2) and sub-rule (7) of rule 1 15], the driver or any person incharge of the vehicle shall rectify the defects so as to comply with the provisions of the sub-rule (2) of rule 115 within a period of 7 days and submit the vehicle to any authorised testing station for re-check and produce the certificate so obtained from the authorised testing station to the authority referred to in sub-rule (1). (6) If the certificate referred to in sub-rule (1) is not produced within the stipulated period of seven days or if the vehicle fails to comply with the provisions of 16[sub-rule (2) and sub-rule (7) of rule 115] within a period of seven days, the owner of the vehicle shall be liable for the penalty prescribed under sub-section (2) of section 190 of the Act. (7) If the driver or any person incharge of the vehicle referred to in sub-rule (1) does not produce the said certificate within the said period of 7 days, such vehicle shall be deemed to have contravened the provisions of the sub-rule (2) of ride 115 and the checking officer shall report the matter to the registering authority. (8) The registering authority shall on receipt of the report referred to in sub-rule (7), for reasons to be recorded in writing suspend the certificate of registration of the vehicle, until such time the certificate is produced before the registering authority to the effect that the vehicle complies with the provisions of '6[sub-rule (2) and sub-rule (7) of rule 299 Substituted by G.S.R. 111 (E), dated 10-2-2004, for "sub-rule (2) of rule 115" (w.e.f. 10-8-2004). 125 (9) On such suspension of the certificate of registration of the vehicle, any permit granted in respect of the vehicle under Chapter V or under Chapter VI of the Motor Vehicles Act, 1988 (59 of 1988) shall be deemed to have been suspended until a fresh "Pollution under control" certificate is obtained.] Speed governors 300[Every motor vehicle (including construction equipment 117. Speedometer.— vehicle), other than an invalid carriage] or a vehicle, the designed speed of which does not exceed thirty kilometres per hour, shall be fitted with an instrument (hereinafter referred to as "speedometer") so constructed and fixed in such a position as to indicate to the driver of the vehicle the speed at which the vehicle is travelling: 301 [Provided that every agricultural tractor shall be fitted with an Engine RPM-cum-Hour Meter:] 302[Provided further that the requirement of provision of speedometer is exempted for construction equipment vehicle in which the driver's cabin rotates about a vertical axis.] On an expiry of one year and three months from the date oi commencement of the Central Motor Vehicles (Amendment) Rules, 1999, every motor vehicle manufactured shall be fitted with a speedometer conforming to the requirements of IS: 11827—1995 specified by Bureau of Indian Standards.] On and after the commencement of the Central Motor Vehicles (Sixth Amendment) Rules, 2000, every construction equipment vehicle manufactured shall be fitted with a speedometer that shall confonn to the requirements of IS: 1 1 827 specified by the Bureau of Indian Standards concerning the speedometer.] 118. Speed governor.—(l) On and from the commencement304 of this rule, such transport vehicles as may be notified by 305[the State Government] in the Official Gazette shall be fitted by the operator of such transport vehicle with a speed governor (speed controlling device) 306[conforming to the Standard A IS : 018, as amended from time to 300 Substituted by G.S.R. 642(E), dated 28-7-2000, for "Every motor vehicle, other than an invalid carriage" (w.e.f. 28-7-2000). Inserted by G.S.R. 338(E), dated 26-3-1993 (w.e.f 26-3-1993). 302 Inserted by G.S.R. 642(E), dated 28-7-2000 (w.e.f. 28-7-2000). 303 Substituted by G.S.R. 214(E), dated 18-3-1999 (w.e.f. 18-3-1999). Earlier sub-R. (2) was substituted by G.S.R. 338(E), dated 26-3-1993 (w.e.f. 26-3-1993). 304 Brought into force on 1 st July, 1993 vide S.O.427(E), dated 27th June, 1991 . Substituted by G.S.R 400(E), dated 31-5-2002, for "the Central Government" (we 1 31-5-2002). 306 Substituted by G.S.R. 660(E), dated 12-9-2001, for "conforming to the Indian Standards IS: 10144—1981 specified by Bureau of Indian Standards" (w.e.f. 12-9-2001). Earlier these words were substituted by G.S.R. 214(E),dated 18-3-1999 (w.e.f. 18-3-1999) and before that by G.S.R. 933(E), dated 28-10-1989 (w.e.f. 28-10-1989). 126 time] in such a manner that the speed governor can be sealed with an official seal

of the State Transport Authority or a Regional Transport Authority in such a way that it cannot be removed or tampered with without the seal being broken. (2) The speed governor of every transport vehicle shall be so set that the vehicle is incapable of being driven at a speed in excess of the maximum preset speed of the vehicle except down an incline. Reduction of noise 119. Horns.—(l) 307[On and after expiry of one year from the date of commencement of 3081 every motor iCle, the Central Motor Vehicles (Amendment) Rules, 1999, agricultural tractor, power tiller and construction equipment vehicle] manufactured shall be fitted with an electric horn or other devices conforming to the requirements of IS: 1884—1992, specified by the Bureau of Indian Standards] for use by the driver of the vehicle and capable of giving audible and sufficient warning of the approach or position of the vehicle: 309[Provided that on and from 1st January, 2003, the 310[horn installation requirements for motor vehicle] shall be as per 311[AlS-01 4] specifications, as may be amended from time to time, till such time as corresponding Bureau of Indian Standards specifications are notified.] (2) No 312[motor vehicle including agricultural tractor] shall be fitted with any multi-toned horn giving a succession of different notes or with any other sound-producing device giving an unduly harsh, shrill, loud or alarming noise. (3) Nothing contained in sub-rule (2) shall prevent the use on vehicles used as 313[used by police ambulance or for fire fighting or salvage purposes or on vehicles officers or operators of construction equipment vehicles or officers of the Motor Vehicles Department] 314[in the course or their duties or on construction equipment vehicles,] of 307 Substituted byG.S.R. 21 4(E), dated 18-3-1999 (w.e.f. 18-3-1999). 308 Substituted by G.S.R. 589(E), dated 16-9-2005, for "every motor vehicle including construction equipment vehicle and agricultural tractor" (w.e.f. 16-9-2006). 309 Inserted by G.S.R. 400(E), dated 31-5-2002 (w.e.f. 31 -5-2002). 310 Substituted by G.S.R. (w.e.f. 16-9-2006). 311 Substituted byG.S.R. 312 Substituted by G.S.R. 313 Substituted by G.S.R. 3 14 Substituted by G.S.R. (w.e.f. 28-7-2000). 589(E), dated 16-9-2005, for "horn installation requirements" I I I da ted 10-2-2004, for "AB-OI 4/2001 " (w.e.f. 10-8-2004). dated 10-2-2004, for "motor vehicle" (w.e.f. 10-8-2004) Ill 1 16(E), dated 27-2-2002 (w.e.f. 27-8-2002). 642(E), dated 28-7-2000, for "in the course of their duties" 127 such sound signals as may be approved by the registering authority in whose jurisdiction such vehicles are kept

120. Silencers.—(l) 315[Every motor vehicle including agricultural tractor] shall be fitted with a device (hereinafter referred to as a silencer) which by means of an expansion chamber or otherwise reduces as far as practicable, the noise that would otherwise be made by the escape of exhaust gases from the engine. Noise standards.—Every motor vehicle shall be constructed and maintained so as to conform to noise standards specified in Part E of the Schedule VI to the Environment (Protection) Rules, 1986, when tested as per IS:3028-1998, as amended from time to 317 [Provided that on and from the 1st day of April, 2006, where different noise levels are prescribed for vehicles, the lowest limits prescribed for vehicles of such category, shall apply to Battery Operated Vehicles.] In the case of agricultural tractor, the passby noise test and the noise level test at the operator's ear level shall be carried out as per IS: 121 80-2000, as amended from time to time and shall conform to the levels as indicated in the Table below:— TABLE Bystander's Position Operator's Ear No. (2) Date of Implementation Six months from the date of notification 90 dB (A) level IOO dB (A) 98 dB Two and a half years from the date 88 dB (A) of notification In the case of power tiller with a riding attachment or power tiller coupled to trailer, the noise level when tested as per IS: 121 80:2000, as amended from time to time, shall not exceed 88dB(A) at the bystander position and 98dB(A) at the operator's ear level.] 121 . Painting of motor vehicles.—(l) 320[No motor vehicle including 321 [agricultural tractor and construction equipment vehicle]] shall be painted in olive green colour except those belonging to the Defence Department. 315 Substituted by G.S.R. 11 1 (E), dated 10-2-2004, for "Every motor vehicle" (w.e.f. 10-8- 2004). 316 317 318 319 320 Substituted byG.S.R. 11 1 10-2-2004(w.e.f. 10-8-2004). Proviso added by G.S.R. 589(E), dated 16-9-2005 (w.e.f. 16-9-2005). Inserted byG.S.R. 11 1 dated 10-2-2004 (w.e.f. 10-8-2004). Sub-R. (4) inserted byG.S.R. 589(E), dated 16-9-2005 (w.e.f. 1-10-2006). Substituted by G.S.R. 642(E), dated 28-7-2000, for "No motor vehicle" (w.e.f. 28-7-2000). 128 (2) No contract carriage other than a tourist vehicle covered by permit under sub-section (9) of section 88 shall be painted in the manner specified in sub-rule (11) of rule 128. (3) No goods carriage other than a goods carriage covered by national permit shall be painted in the manner specified in sub-rule (1) of rule 90. 322 Chassis number and engine number 323 Embossment of the chassis number and engine number or in the case of battery operated vehicles, motor number and month of manufacture.—](l) On and from the date of commencement of the Central Motor Vehicles (Amendment) Rules, 1993, 324[every motor vehicle including agricultural tractor and construction equipment vehicle other than trailer and semi-trailer] shall bear the identification number including month and year of manufacture, embossed or etched or punched on it: Provided that in such vehicles where space is insufficient for etching, embossing or 325[engine number/motor number, chassis number and month of punching the manufacture], the etching, embossing or punching of year and month of manufacture shall be on an identification plate welded or rivetted to the body of the vehicle. -A) On and from the date of commencement of the Central Motor Vehicles (Sixth Amendment) Rules, 2000, every construction equipment vehicle shall bear the identification number including month and year of manufacture, embossed or etched or punched on it: Provided that in a construction equipment vehicles where the space is insufficient for etching, embossing or punching the engine number, the chassis number and month of manufacture, the etching, embossing or punching of year and month of manufacture shall be on an identification plate welded or rivetted to the body of the vehicle.] 327 [(2) The vehicle manufacturer shall intimate to the certifying testing agency regarding the place where the numbers shall be embossed or etched or punched including code for the year and month of production in respect of each model and such testing agency shall include these details in the certificate of compliance granted by that agency under 321 Substituted by G.S.R. 11 1 (E), dated 10-2-2004, for "construction equipment vehicle" (w.e.f. 10-8-2004). 322 R. 122 substituted by G.S.R. 338(E), da ted 26-3-1993 (w.e.f. 26-3-1993). 323 Substituted by G.S.R. 589(E), dated 16-9-2005, for the heading (w.e.f. 1-4-2006). 324 Substituted by G.S.R. 1 1 1 (E), dated 10-2-2004, for "every motor vehicle other than trailers and semi-trailers" (w.e.f. 10-8-2004). 325 Substituted by G.S.R. 589(E), dated 16-9-2005, for "engine number, chassis number and month of manufacture all together" (w.e.f. 1-4-2006). 326 Inserted by G.S.R. 642(E), dated 28-7-2000 (w.e.f. 28-7-2000). 327 Substituted by G.S.R. 221 (E), dated 28-3-2001 (w.e.f. 28-3-2001 129 rule 126. No manufacturer shall change the place of embossing, etching or punching and the code for the month and year of production without prior intimation by registered post to the testing agency which granted the certificate of compliance to these rules: Provided that in no case the height of the chassis number embossed, etched or punched shall be less than five millimetres for vehicles having overall length less than six metres and less than seven millimetres for the vehicle having overall length more than

six metres.] SAFETY DEVICES Safety devices for drivers, passengers and road users 328[which has provision for pillion 123. Safety devices in motor cycle.—No motor cycle, rider] shall be constructed without provision for a permanent hand grip on the side or behind the driver's seat and a foot rest and a protective device covering not less than half of the rear wheel so as to prevent the clothes of the person sitting on the pillion from being entangled in the wheel: 329[Provided that on and from 1st January, 2003, the pillion hand holds shall be governed by IS: 14495-1998 specifications, as may be amended from time to time.] 330[124. Safety standards of components.— 331 [(1) The Central Government may, from time to time, specify, by notification in the Official Gazette, the standards or the relevant standards specified by the Bureau of Indian Standards of any part, component or assembly to be used in the manufacture of a vehicle including construction equipment vehicle and the date from which such parts, components or assemblies are to be used in the manufacture of such vehicle and on publication of such notification every manufacturer shall use only such of these parts, components or assemblies in manufacture of the vehicle:] 332[Provided that any notification issued under this sub-rule before the commencement of the Central Motor Vehicles (6th Amendment) Rules, 2001 , shall not be applicable after 333126th August, 2002] in respect of any such commencement upto and including construction equipment.] 328 329 330 331 332 333 Inserted by G.S.R. 338(E), dated 26-3-1993 (w.e.f. 26-3-1993). Inserted by G.S.R. 400(E), dated 31-5-2002 (w.e.f. 31-5-2002). R. 124 substituted by G.S.R. 338(E), dated 26-3-1993 (w.e.f. 26-3-1993). Sub-R (l) substituted by G.S.R. 1 16(E), dated 27-2-2002 (w.e.f. 27-8-2002). Inserted by G.S.R. 675(E), dated 17-9-2001 (w.e.f. 17-9-2001). Substituted by G.S.R. 242(E), da ted 28-3-2002, for "31st March, 2002" (w.e.f. 28-3-2002). 130 -A) 335[On and from 1st May, 2003], the general requirements of vehicle rear under run protecting device and the technical requirements of vehicle lateral protection side shall be as per IS: 14812-2000 specifications and as per IS: 14682-1999, respectively, as may be amended from time to time:] 336[Provided that the vehicle manufacturers shall ensure the fitment of the rear under run protective device in vehicles of categories N2, N3 and their trailers except special purpose vehicles namely tractors and tippers at their end and lateral under run protective device either at their factory or at their dealer's end. Vehicle not fitted with such devices shall not be registered under these rules. They shall also ensure to supply necessary kits if the fitment is not done by them in the case of lateral under-run protective device. Provided further that the rear under run protective device shall also be painted with yellow and white zebra stripes on the entire rear face of the device.] 337 [(2) Every manufacturer shall get the prototype of the part, component or sub- assembly for which standards have been notified, approved from any agency as referred to in rule 126 or the Central Institute of Road Transport, Pune, or in case of compliance with notified Indian Standards from any laboratory duly authorized by the Bureau of Indian Standards. On the basis of such approval, every manufacturer shall also certify compliance with the provisions of this rule in

Form 22.]] The Central Government may, by notification in the Official Gazette, frame a scheme for marking to be affixed on any part or component or assembly to be used in the manufacture of the vehicle and specify the date from which such parts, components or assemblies are to be used in the manufacture of the vehicle.] 339[1 24-A. Safety standards of components for agricultural tractors. — (l) The bulbs of the following lamps used on agricultural tractors shall conform to 1ST 606-1979, as amended from time to time. (a) Head light main and dip; (b) Parking light; (c) Direction indicator lamp; 334 Inserted by G.S.R. 400(E), dated 31-5-2002 (31-5-2002). 335 Substituted by G.S.R. 845(E), dated 27-12-2002, for "On and from 1st January, 2003" (w.e.f. 27-12-2002). 336 Provisos inserted by G.S.R. 589(E), dated 16-9-2005 (w.e.f. 16-3-2006). 337 Substituted by G.S.R. 21 4(E), dated 18-3-1999 (w.e.f. 18-3-1999). 338 Inserted by G.S.R 221 (E), dated 28-3-2001 (w.e.f. 28-3-2001). 339 Inserted by G.S.R. 11 1 (E), dated 10-2-2004 (w.e.f. 10-8-2004) and as corrected by vide G.S.R. 176(E), dated 5-3-2004. 131 (d) Tail lamp; (e) Reversing lamp; (f) Stop lamp; (g) Rear Registration mark indicating lamp; and (h) Top light. (2) The lighting and light signalling devices for agricultural tractor shall be in accordance with AIS:030, as amended from time to time, till such time the corresponding BIS standard is notified: Provided that the performance requirements of the lighting, light signalling and indicating systems of agricultural tractor manufactured on and from 1st October, 2005] shall be in accordance with safety standard AIS:062, as amended from time to time, till such time corresponding BIS standards are notified. (3) The hydraulic brake hoses wherever used in agricultural tractor and its trailer shall be in accordance with IS:7079-1995, as amended from time to time. (4) The vegetable, non-mineral based hydraulic fluids wherever used in agricultural tractor shall be in accordance with IS:8654-1 986, as amended from time to time. (5) The tow hook wherever used in agricultural tractor shall be in accordance with IS: 12362 (Part 2), as amended from time to time. (6) The fuel tanks of agricultural tractor shall comply with the requirements laid down in IS: 12056-1987, as amended from time to time: Provided that the clause 3.2.1 of IS: 12056-1987 be exempted for agricultural tractor that have a gravity feed fuel flow system. (7) The wheel nuts and hub caps used in agricultural tractor shall be in accordance with IST3941 -1994, as amended from time to time.] 58[124-B. Safety Standards of components for power tillers.—(l) The lamps and bulbs used on power tillers for— (a) the head light main and dip; (b) the parking light; (c) the direction indicator lamp; (d) the tail lamp; (e) the reversing lamp; (f) the stop lamp; (g) the rear Registration mark illuminating lamp, shall be in accordance with AIS:034:2004 as amended from time to time till the corresponding BIS 132 specifications are notified under the Bureau of Indian Standards Act, 1986 (63 of 1986). (2) The lighting and signaling devices shall be in accordance with AIS:062:2004 as amended from time to time, till the corresponding BIS specifications are notified under the Bureau of Indian Standards Act, 1986 (63 of 1986). (3) The safety and comfort of the operator of a power tiller shall be in accordance with 1ST 2239 (Part 3): 1 996, as amended from time to time. (4) The gradeability of a power tiller coupled to a trailer under the declared combination weight by the manufacturer shall be in accordance with IS:9980:1 988, as amended from time to time.] 340[125. Safety belt, collapsible steering column, autodipper and padded dash boards.— 341 [(1)] One year from the date of commencement of the Central Motor Vehicles (Amendment) Rules, 1993, the manufacturer of every motor vehicle other than motor cycles and three-wheelers of engine capacity not exceeding 500 cc, shall equip every such vehicle with a seat belt for the driver and for the person occupying the front seat. -A) The manufacturer of every motor vehicle of M-l category shall equip every motor vehicle with a seat belt for a person occupying the front facing rear seat: Provided that the specifications of Safety Belt Assemblies and Safety Belt Anchorages in motor vehicles shall conform to AIS: 005-2000 and AIS: 015- 2000 specifications, respectively, as may be amended from time to time, till such time as corresponding Bureau of Indian Standards specifications are notified: Provided further that on and after 1st October, 2002, the specification of Safety Belt Assemblies and Safety Belt Anchorages in motor vehicles shall conform to AIS: 005- 2000 and AIS: 015-2000 specifications, respectively.] (2) Six months from the date of commencement of the Central Motor Vehicles (Amendment) Rules 1993, all motor vehicles shall be equipped with rear view mirror. 343[Provided that 344[on and from 1st May, 2003], the rear view mirror specifications and installation requirements shall be as specified by AIS: 001 - 340 R. 125 substituted by G.S.R. 338(E), dated 26-3-1993 (w.e.f. 26-3-1993). 341 R. 125 renumbered as sub-R. (1) thereof by G.S.R. 720(E), dated 10-9-2003 (w.e.f. 10-10- 2003). 342 Sub-R. (1 -A) substituted by G.S.R. 400(E), dated 31 -5-2002 (w.e.f. 31-5-2002). 343 Inserted by G.S.R. 400(E), dated 31-5-2002 (w.e.f. 31-5-2002). 344 Substituted by G.S.R. 845(E), dated 27-12-2002, for "on and from 1st January,

2003" (w.e.f. 27-12-2002). 133 2001 and AIS: 002-2001 respectively, as may be amended from time to time, till such time as corresponding Bureau of Indian Standards specifications are notified.] 345 * * * 347 [(5) On and after 1st January, 2003, the size and specifications on seats, their Anchorages and Head Restraints (excluding luggage retention) on M-l vehicle category shall conform to AIS : 016-2000 specifications, as may be amended from time to time, till such time as corresponding Bureau of Indian Standards specifications are notified.] On and from the 1st day of October, 2007, the seats, their anchorages and their head restraints for M2, M3, Nl, N2 and N3 category of vehicles, shall be in accordance with AIS:023:2005 as amended from time to time till the corresponding BIS specifications are notified under the Bureau of Indian Standards Act, 1986 (63 of 1986).] 349[1 25-A. Safety belt, etc., for construction equipment vehicles.—One year from the date of commencement of the Central Motor Vehicles (Sixth Amendment) Rules, 2000, the manufacturer of every construction equipment vehicle other than an agriculture tractor shall equip every such vehicle with a seat belt for the driver and for the person occupying the front seat, and with a rear view mirror.] 350[1 25-B. Special requirements for transport vehicles that are driven on hills.—(l) On and from the 1st day of October, 2006, such four wheeled transport vehicles as may be notified by State Governments in the Official Gazette plying on such routes or areas in hilly terrains shall be fitted with fog lamp, power steering, defogging and demisting system and that the State Government would provide a lead time of six months for this purpose. (2) Anti-Lock Braking System shall be introduced in all M-2 category buses including those plying on All India Tourist Permit on and from the 1st day of October, 2007 in hill areas. 125-C. Body building and approval.—(l) On a date to be notified, the testing and approval for body building of buses shall be accordance with AIS:052:2001 as amended 345 346 347 348 349 350 Sub-R. (3) omitted by G.S.R. 29(E), dated 15-1-1998 (w.e.f. 15-1-1998). Sub-R. (4) omitted by G.S.R. 659(E), dated 12-9-2001 (w.e.f. 12-9-2001 Inserted by G.S.R. 31-5-2002 (w.e.f. 31-5-2002). Sub-R. (6) inserted by G.S.R. 589(E), dated 16-9-2005 (w.e.f. 16-9-2005). Inserted by G.S.R. 642(E), dated 28-7-2000 (w.e.f. 28-7-2000). Rr. 125-8 and 125-C inserted by G.S.R. 589(E), dated 16-9-2005 (w.e.f. 16-9-2005). 134 from time to time for vehicles mentioned therein, till the corresponding BIS specifications are notified under the Bureau of Indian Standards Act, 1986 (63 of 1986). (2) The testing and approval for the body building of school buses shall be iii accordance with AIS:063:2005 as amended from time to time for vehicles mentioned therein, till the corresponding BIS specifications are notified under the Bureau of Indian Standards Act, 1 986 (63 of.1 986).] 351 [126. Prototype of every motor vehicle to be subject to test.—On and from the date of 71 commencement of Central Motor Vehicles (Amendment) Rules, 1993, every [manufacturer or importer] of motor vehicles other than trailers and semi-trailers shall submit the prototype of the vehicle 72[to be manufactured or imported by him] for test by the Vehicle Research and Development Establishment of the Ministry of Defence of the Government of India or Automotive Research Association of India, Pune, or the Central 66. 67. 68. 69. 70

71. Substituted by G.S.R. 11 1 (E), dated 10-2-2004, for "manufacturer" (w.e.f. 10-8- 2004)

72. Substituted by G.S.R. 11 1 (E), dated 10-2-2004, for "to be manufactured by him" (w.e.f. 10-8-2004). Machinery Testing and Training Institute, Budni (MP), or the Indian Institute of Petroleum, Dehradun, and such other agencies as may be specified by the Central Government for granting a certificate by that agency as to the compliance of provisions of the Act and these rules:] 352[Provided that the procedure for type approval of certification of motor vehicles for compliance to these rules shall be in accordance with the A IS: 017-2000, as amended from time to time:] 353[Provided further that in respect to the vehicles imported into India as completely built units (CBU), the importer shall submit a vehicle of that particular model and type to the 351 R. 126 substituted by G.S.R. 338(E), dated 26-3-1993 (w.e.f. 26-3-1993). 352 Inserted by G.S.R. 642(E), dated 28-7-2000 (w.e.f. 28-7-2000). 353 Inserted by G.S.R. 11 1 dated 10-2-2004 (w.e.f. 10-8-2004). 135 testing agencies for granting a certificate by that agency as to the compliance to the provisions of the Act and these rules.] 354[1 26-A. The testing agencies referred to in rule 126 shall, in accordance with the procedures laid down by the Central Government, also conduct tests on vehicles drawn from the production line of the manufacturer to verify whether these vehicles conform to the provisions of 355[rules made under section 1 10 of the Act:]] 356[Provided that in case the number of vehicles sold in India for a given base model and its variants (manufactured in India or imported to India) are less than 250 in any consecutive period of six months in a year, then such base model and its variants need not be subjected to the above test, if at least one model or its variants manufactured or imported by

that manufacturer or importer, as the case may be, is subjected to such tests at least once in a year: Provided further that, in case the number of base models and its variants manufactured/imported is more than one and if the individual base model and its variants are less than 250 in any consecutive period of six months in a year, then the testing agencies can pick up one of the vehicles out of such models and their variants once in a year for carrying out such test.] 357 [1 26-B. Prototype of every construction equipment vehicle to be subject to test.—(l) On and from the date of commencement of the Central Motor Vehicles (Sixth Amendment) Rules, 2000, every manufacturer of construction equipment vehicle shall submit the prototype of the construction equipment vehicle to be manufactured by him for test by any of the agencies referred to in rule 126 for granting a certificate by that agency as to the compliance of provisions of the Act and these rules. (2) The testing agencies referred to in rule 126 shall in accordance with the procedure laid down by the Central Government conduct tests on vehicles drawn from the production line of the manufacturer to verify whether the vehicles conform to the provisions of the Act, or rules or orders issued thereunder shall be renumbered as sub- rule (1) thereof and after sub-rule (1) as so, renumbered:] 358[Provided that the provisions of this sub-rule shall not be applicable in respect of any construction equipment upto and including 359126th August, 2002.] 354 355 356 357 358 Inserted by G.S.R. 338(E), dated 26-3-1993 (w.e.f. 26-3-1993). Substituted by G.S.R. 221 (E), dated 28-3-2001 , for "rule 1 15" (w.e.f. 28-3-2001). Inserted by G.S.R. 400(E), dated 31-5-2002 (w.e.f. 31-5-2002). Inserted by G.S.R 642(E), dated 28-7-2000 (w.e.f. 28-7-2000). Inserted by G.S.R. 675(E), dated 17-9-2001 (w.e.f. 17-9-2001). 136

127. Quality certificate by On and from the date361 of commencement of this rule, the sale of every motor vehicle manufactured shall be accompanied by a certificate of road-worthiness issued by the manufacturer in

Form 22. On and from the date of commencement of the Central Motor Vehicles (Sixth Amendment) Rules, 2000, the sale of every construction equipment vehicle manufactured shall be accompanied by a certificate of road-worthiness issued by the manufacturer in Form 22.] Special provisions 128. Tourist vehicles other than motor cabs, etc.—A tourist vehicle other than motorcab, taxicab, campers van house trailer, shall conform to the following specifications, namely:— The dimension shall conform to the dimensions specified in rule 93.] (2) Structure.—Structure of the tourist vehicle should be sturdy and strong structural frame work using suitable material of adequate sectional area and an aerodynamical shape. For exterior panelling, aluminium sheet or good quality panelling material should be used. As regards interior panelling it should cover the entire interior roof, sides, back and bulk head portions. The body should be made completely leakproof and dustproof. The vehicle should also be rattle proof. Sound deadening should also be done for all panelling including the floor. Passenger entrance and exit.—The passenger entrance-cum-exit door shall be located on the left side of the vehicle and minimum door width shall be 685 millimetres. The door handle should be capable of being handled from inside as well as from outside. The door may be operated pneumatically or hydraulically or electrically with suitable locking devices.] Emergency exit.—The emergency exit provided on the tourist vehicle shall meet the following requirements, namely:— (i)be clearly marked "EMERGENCY EXIT" in bold letters on the inside and the outside of the tourist vehicle; 359 Substituted by G.S.R. 242(E), da ted 28-3-2002, for "31st March, 2002" (w.e.f. 28-3-2002). 360 R. 127 renumbered as sub-R. (1) thereof by G.S.R. 642(E), dated 28-7-2000 (w.e.f. 28-7- 2000). 361 1st day of April, 1991 videS.0.941 (E), dated 1 lth December, 1990. 362 Inserted by G.S.R. 642(E), dated 28-7-2000 (w.e.f. 28-7-2000). 363 Substituted by G.S.R. 933(E), dated 28-10-1989 (w.e.f. 28-10-1989). 364 Sub-R. (3) substituted by G.S.R. 338(E), dated 26-3-1993 (w.e.f. 26-3-1993). 365 Sub-R. (4) substituted by G.S.R. 589(E), dated 16-9-2005 (w.e.f. 16-9-2006). 137 (ii) be so designed as to open from inside and the outside of the tourist vehicle; (iii) be equipped with a fastening device which can be quickly released but so designed as to offer protection against accidental release; (iv) be easily accessible to persons of normal height standing on the ground outside the vehicle; (v) be easily accessible to the passengers; (vi) be such that no seat or other object placed in the vehicle shall restrict the passage to the emergency door; (vii) be located either at the back or on to the right hand side of the vehicle; and (viii) emergency exist may be provided in the form of a window with breakable glass. In such cases, a suitable device shall be provided at a convenient place to break open the glass in the event of an emergency.] (5) Driver entry and exit.—A separate door with suitable sliding window shall be provided for the driver near the driver seat. (6) Windscreen.—(i) The front windscreen shall be of clear view and distortion free, with safety glass and shall be of full width of the tourist vehicle. If made in two halves, the width of the centre vertical joint, inclusive of the rubber glazing fitment of the front windshield shall be such as to enhance the elegance of the tourist vehicle. (ii) Rear windscreen shall be of safety glass or laminated safety glass. It shall match with the windows provided on the vehicle. Sliding curtains shall be provided on the rear windscreen. (7) Windows.—Windows of tourist vehicles should have a minimum space of 14.25 millimetres and shall be of safety or laminated safety glass. Windows shall be of double sliding type slider running smoothly in channels without rattle. All safety or laminated safety glasses used for windows should conform to standards laid down by the Bureau of Indian Standards. Windows shall be provided with sliding curtains. (8) Ventilation.—Adequate arrangements shall be provided for ventilation for the passenger compartment as well as the driver compartment. All ventilators and windows shall be such that when closed they will not permit ingress of rain water or dust in the passenger or driver compartment. (9) Luggage.—(i) Luggage holds shall be provided at the rear or at the sides, or both, of the tourist vehicle with sufficient space and size, and shall be rattleproof, dustproof and waterproof with safety arrangements; 138 (ii) The light luggage racks, on strong brackets shall be provided inside the passenger compartment running along the sides of the tourist vehicle. Except where nylon netting is used, the under side of the rack shall have padded upholstery to protect the passengers from an accidental hit. The general design and fitment of the rack shall be so designed as to avoid sharp corners and edges. 366 * * * (10) Seats and seating arrangements.— (ii) Seating layout shall be 367[two and two or one and two or one and one] on either side, all seats facing forward, with a clear gangway of at least 355 millimetres width at the centre. Each passenger seat shall have a minimum area of 447 millimetres x 457 millimetres and an arm rest on both sides and seat back of full height. (iii) The seat frames shall be sturdy, properly finished and so mounted as to transfer the weight directly to the structural members of frame-work. The seats shall be of

reclining type and adjustable. (iv) The seats shall be so mounted as to provide at least 280 millimetres leg room from the front of the rear seat to the back of the front seat. A foot rest at suitable location and height shall be provided for every passenger. (11) Painting and finishing.—The tourist vehicle shall be painted in a manner referred to in sub-rules (7) and (8) of rule 85-A in white colour with a blue ribbon of five centimetres width at the centre of the exterior of the body. (12) Lighting.—(i)(a) The passenger compartment shall be adequately illuminated. (b) Arrangement shall be provided to eliminate reflection of the light from the passenger compartment on the windscreen. (c) In addition to the lights in passenger compartment, at least two night-lights with coloured domes, shall be provided in the passenger compartment. (ii) Front and rear destination boxes, if provided, shall be illuminated. (iii) One independently operated light fitting shall be provided for illumination of the driver's or attendant's seat area. (iv) A light fitting shall be provided for illuminating the steps at the passenger entrance door. (7;) Each luggage hold shall have a light fitting for illumination of that hold. (vi) Wiring in the passenger compartment shall be with low tension cable conforming to IS: 2465 of size commensurate with the estimated current loading. The wires shall be 366 Sub-a. (z) omitted by G.S.R. 933(E), dated 28-10-1989 (w.e.f. 28-10-1989). 367 Substituted by G.S.R 933(E), dated 28-10-1989, for "two and two" (w.e.f. 28-10-1989), 139 carried in PVC sleevings or conduit or casing of adequate size. When any wire passes through a hold in a panel or sheet metallic components, a rubber grommet of adequate size shall be provided for protection of the insulation. (13) Fittings and accessories.—A tourist vehicle shall be equipped with the following, namely:— (1) Convex rear view mirrors one on each side, universally adjustable and of adequate dimensions. (ii) First-aid box with glazed front, with necessary medicines for first-aid. (iii) Fire extinguisher, dry powder type located near the engine compartment. (iv) Insulation on interior or exterior of the engine bonnet for reducing the noise and heat from the engine. (v) Provision for locating vehicle tools securely. (vi) Heavy duty windscreen wiper system. (vii) Adjustable sunvisors of adequate size for the driver and for the attendant. (viii) Electrically operated wide indicators or blinkers, stop lights and parking lights. (ix) Dual head lamps. (x) Suitable illumina tion for the registration number plate at the rear. (xi) Horn. (xii) Electric fans, of 8 inches* sweep adjustable, at least eight in number, suitably spaced in the passenger compartment and controlled by switches located near the seat. (xiii) Electric bell or buzzer located near the seat of driver or attendant and operated by at least four push button controls placed at suitable location in the passenger compartment. (xiv) Ash trays near passenger seats of a design convenient for cleaning them at intermediate stops of the tourist vehicle. (xv) Drinking water and ice-box. (xvi) Rack for magazines and other reading material. (xvii) Back pockets and numbers for each seat. (xviii) Public address system with at least four speakers suitably located in the passenger compartment. (xix) Document frame, located near the seat of driver, for carrying vehicle documents, tax token, licence and permit. (xx) Mud flaps for front and rear wheels: 140 368[Provided that the provisions of clauses (2) and (7), sub-clause (iv) of clause (12), sub-clauses (ix), (xii) and (xiii) of clause (1 3), of this rule shall not apply to the vehicles of integral construction.] 369[1 28-A. Special provision for M3 category of vehicles.—The provisions of sub-rule (4) of rule 128 shall apply to all M3 category of vehicles.] 129. Transportation of goods of dangerous or hazardous nature to human life.—(l) Every owner of a goods carriage transporting any dangerous or hazardous goods shall, in addition to complying with the provisions of any law for the time being in force in relation to any category of dangerous or hazardous goods, comply with the following conditions, namely:— (i) every such goods carriage, carrying the same type of dangerous or hazardous goods (whether in bulk or in packages), shall display a distinct mark of the class lable appropriate to the type of dangerous or hazardous goods specified in column 3 of the Table I to rule 137; * 203 millimetres. (ii) every package containing dangerous or hazardous goods shall display the distinct class labels appropriate to the type of dangerous or hazardous goods specified in column 3 of the Table I to rule 137; (iii) in the case of packages containing goods listed in Table 111 in rule 137 and which represents two hazards as given in column 2 thereof, such packages shall display distinct labels to indicate both the hazards; every goods carriage carrying any dangerous or hazardous goods shall be equipped with safety equipments for preventing fire, explosion or escape of hazardous or dangerous goods.] One year from the date of commencement of Central Motor Vehicles (Amendment) Rules, 1993, every goods carriage carrying goods of dangerous or hazardous nature to human life, shall be fitted with techograph (an instrument to record the lapse of running time of the motor vehicle; time speed maintained, acceleration, deceleration, etc.) conforming to the specifications of the Bureau of Indian Standards.] 368 Added by

G.S.R. 933(E) daled 28-10-1989 (W.e.f. 28-10-1989). 369 R. 128-A inserted by G.S.R. 589(E), dated 16-9-2005 (w.e.f. 16-9-2007). 370 Added byG.S.R. 338(E), dated 26-3-1993 (w.e.f. 26-3-1993). 371 [1 29-A. Spark arrester.—Six months from the date of commencement of Central Motor Vehicles (Amendment) Rules, 1993, every goods carriage carrying goods of dangerous or hazardous nature to human life shall be fitted with a spark arrester.] 130. Manner of display of class labels.—(l) Where a class label is required to be displayed on a vehicle, it shall be so positioned that the size of the class label is at an angle of 45 degrees to the vertical and the size of such label shall not be of less than twenty-five millimetres square which may be divided into two portions, the upper half portion being reserved for the pictorial symbol and the lower half for the text: Provided that in the case of smaller packages a suitable size of the label may be adopted. (2) Where the class label consists of adhesive material, it shall be waterproof and where it consists of metal or other substance on which the pictorial symbol and the text are printed, painted or affixed, they shall be affixed directly on such material and in every case, the surface of the vehicle surrounding the label shall be of a colour that contrasts vividly with the background of the class label. (3) Every class label displayed on a vehicle shall be positioned in such a manner that it does not obscure other markings required to be displayed under any other law. (4) Every goods carriage carrying any dangerous or hazardous goods shall display the class label on the places shown in the Table in rule 134. 372[131. Responsibility of the consignor for safe transport of dangerous or hazardous goods.—(l) It shall be the responsibility of the consignor intending to transport any dangerous or hazardous goods listed in Table Ill, to ensure the following, namely:— (a) the goods carriage has a valid registration to carry the said goods; (b) the vehicle is equipped with necessary first-aid, safety equipment a nd antidotes as may be necessary to contain any accident; (c) that the transporter or the owner of the goods carriage has full and adequate information about the dangerous or hazardous goods being transported; and (d) that the driver of the goods carriage is trained in handling the dangers posed during transport of such goods. (2) Every consignor shall supply to the owner of the goods carriage, full and adequate information about the dangerous or hazardous goods being transported as to enable such owner and its driver to,— 371 Inserted by G.S.R. 338(E), dated 26-3-1993 (w.e.f. 26-3-1993). 372 R. 131 substituted byG.S.R. 338(E), dated 26-3-1993 (w.e.f. 26-3-1993). 142 (a) comply with the requirements of rules 129 to 137 (both inclusive) of these rules; and (b) be aware of the risks created by such goods to health or safety of any person. (3) It shall be the duty of the consignor to ensure that the information is accurate and sufficient for the purpose of complying with the provisions of rules 129 to 137 (both inclusive) of these rules.] 373[132. Responsibility of the transporter or owner of goods carriage.—(l) It shall be the responsibility of the owner of the goods carriage transporting any dangerous or hazardous goods to ensure the following, namely:— (a) that the goods carriage has a valid registration to carry the said goods and the said carriage is safe for the transport of the said goods; and (b) the vehicle is equipped with necessary first-aid, safety equipment, tool box and antidotes as may be necessary to contain any accident. (2) Every owner of a goods carriage shall, before undertaking the transportation of dangerous or hazardous goods in his goods carriage, satisfy himself that the information given by the consignor is full and accurate in all respects and correspond to the classification of such goods specified in rule 137. (3) The owner of a goods carriage shall ensure that the driver of such carriage is given all the relevant information in writing as given in Annexure V of these rules in relation to the dangerous or hazardous goods entrusted to him for transport and satisfy himself that such driver has sufficient understanding of the nature of such goods and the nature of the risks involved in the transport of such goods and is capable of taking appropriate action in case of an emergency. (4) The owner of the goods carriage carrying dangerous or hazardous goods, and the consignor of such goods shall lay down the route for each trip which the driver shall be bound to take unless directed or pennitted otherwise by the Police Authorities. They shall also fix a time table for each trip to the destination and back with reference to the route so laid down. (5) It shall be the duty of the owner to ensure that the driver of the goods carriage carrying dangerous or hazardous goods holds a driving licence as per provisions of rule 9 Of these rules. 373 R. 132 substituted by G.S.R. 338(E), dated 26-3-1993 (w.e.f. 26-3-1993). 143 (6) Notwithstanding anything contained in rules 131 and 132, it shall be sufficient compliance of the provisions of these rules if the consignor transporting dangerous or hazardous goods and the owner of the goods carriage or the transporter, abides by these conditions within six months after the date of coming into force of the Central Motor Vehicles (Amendment) Rules, 1993.] 374[133. Responsibility of the driver.—(l) The driver of a goods carriage transporting dangerous or hazardous goods shall ensure that the

information given to him in writing under sub-rule (3) of rule 132 is kept in the driver's cabin and is available at all time while the dangerous or hazardous goods to which it relates, are being transported. (2) Every driver of a goods carriage transporting any dangerous or hazardous goods shall observe at all times all the directions necessary for preventing fire, explosion or escape of dangerous or hazardous goods carried by him while the goods carriage is in motion, and when it is not being driven he shall ensure that the goods carriage is parked in a place which is safe from fire, explosion and any other risk, and at all times the vehicle remains under the control and supervision of the driver or some other competent person above the age of 18 years.] 134. Emergency information panel.—(l) Every goods carriage used for transporting any dangerous or hazardous goods shall be legibly and conspicuously marked with an emergency information panel in each of the three places indicated in the Table below so that the emergency information panel faces to each side of the carriage and to its rear and such panel shall contain the following infonnation, namely:— (ii) the correct technical name of the dangerous or hazardous goods in letters not less than 50 millimetres high; (i) the United Nations class number for the dangerous or hazardous goods as given in Column 1, Table 1 appended with rule 137, in numerals not less than 100 milimetres (iii) the class label of the dangerous or hazardous goods of the size of not less than 250 millimetres square; (iv) the name and telephone number of the emergency services to be contacted in the event of fire or any other accident in letters and numerals that are not less than 50 millimetres high and the name and telephone number of the consignor of the dangerous or hazardous goods or of some other person from whom expert information and advice 374 R. 133 substituted byG.S.R. 338(E), dated 26-3-1993 (w.e.f. 26-3-1993). 144 can be obtained concerning the measures that should be taken in the event of an emergency involving such goods. The information contained in sub-rule (1) shall also be displayed on the vehicle by means of a sticker relating to the particular dangerous or hazardous goods carried in that particular trip.] Every class label and emergency information panel shall be marked on the goods carriage and shall be kept free and clean from obstructions at all times. TABLE PT ACFS FOR FIXING EMERGENCY INFORMATION PANELS ON VEHICLES AND DIMENSIONS Enza O 375 Inserted by G.S.R. 338(E), dated 26-3-1993 (w.e.f. 26-3-1993). 376 Sub-R. (2) renumbered as sub-R (3) byG.S.R. 338(E), dated 26-3-1993 (w.e.f. 26-3- 1993). 145 135 10 Corroct Technical Name UNNo. 120 15 HAZCHEM (a) (c) i 20 10 10 55 In Emergency Dial (d) 10 (Subsidiary- H!sk Specialist Advice (0 (Class cables) 600 15 10 — (All dimensions are expressed in millimetres) 135. Driver to be instructed.—The owner of every goods carriage transporting dangerous or hazardous goods shall ensure to the satisfaction of the consignor that the driver of the goods carriage has received adequate instructions and training to enable him to understand the nature of the goods being transported, by him, the nature of the risks arising out of such goods, precautions he should take while the goods carriage is in motion or stationary and the action he has to take in case of any emergency. 377[136. Driver to report to the police station about accident.—The driver of a goods carriage transporting any dangerous or hazardous goods shall, on the occurrence of an accident involving any dangerous or hazardous goods transported by this carriage, report forthwith to the nearest police station and also inform the owner of the goods carriage or the transporter regarding the accident.] 137. Class labels.—ln respect of the dangerous or hazardous goods specified in column (2) of the Table below, the labels specified in the corresponding entry in column (3) shall be the class labels, namely:— 377 Substituted by 26-3-1993 (w.e.f. 26-3-1993). 146 UN Class No. (1) Explosives 1

2. TABLE 1 Class of Labels Classification of goods (2) Symbol (exploding bomb) Background Black Orange Gases, compressed, liquefied, dissolved under pressure or deeply refrigerated.2.1 Non-flammable gases Symbol (gas cylinder) Background 2.2 Inflammable gases Symbol (Flame) Background 147 : Black or White : Green : Black or White : Red Class label (3) EXPLOSIVES X, NON-FLAMMABLE COMPRESSED / GAS FLAMMABLE GAS 2.3 Poison (toxic) gases POISON GAS Symbol (skull and crossbones) B ackground Inflammable Liquids Black • White 3

4. FLAMMABLE LIQUI . Black or White Symbol (flame) Background : Red Inflammable solids, substances liable to spontaneous combustion; substances which, on contact with water, emit inflammable gases. 4.1 Inflammable solids 4. Inflammable solids, substances liable to spontaneous combustion; substances which, on contact with water, emit inflammable gases. 4.1 Inflammable solids MABLE SOLID Symbol (flame) Background : Black or Whi : Red 4.2 Substances liable to spontaneous combustion Symbol (flame) B ackground 4.3 Substances which, on contact with water, emit inflammable gases SPONTANEOUSLY COUBUSTIBLE : Black : Upper half white DANGEROUS WHEN WET 5. Symbol (flame) Background Oxidizing substances and organic peroxides. 5.1 Oxidizing substances Symbol (flame over circle) B ackground 149 Black or Whi te Blue OXIDIZING AGEN . Black Yellow 6. 5.2 Organic peroxides Poisonous (toxic) substances and infectious substances. 6.1 Poisonous (toxic) substances 6.2 Harmful substances ORGAN'CPERO)CDE Synnlx»l (Ilarne over circle) Backproutld POISON SYInLÄ)l (Ekuli and u-ri s" STOWAWAYFROU / Yet low While The hali ol- lhe shauld bear lhe ;nscriplion: I awav Inod ($1 . eras; over ut- whea t): B. nkground 150 6.3 Infectious substances INFECTIOUS / SUBSTANC The tmhalt-af [he tabet sh In substa lio.na and inscripl i " In the caseoi lea kage immediately-notify Ihiblic I leallh Auth' irilv (uplional) .Syml•x (Iht'LV Is superirnposed a circle and inscription fiackground Radioactive substances iA•hite 7 8. gynboI-—3 segments of a circle—a number and 101 lering of Ihe Class label) shall be black on a whi te background and the parallel lines bordering the Class label shall black and shall be 5 nun thick Corrosives CORROSEVE Symbol (iiqujds spilling from two glass vessels and a hanci and n metal) • Background. 't Ipper half while and Lower half black with white border 151 378TABLE Indicative criteria (A) Explosives: An explosive means a solid or liquid or pyrotechnic substance (or a mixture of substances) or an article,— (i) which is in itself capable by chemical reaction of production of gas at such a temperature and as such a speed as to cause damage to the surroundings; (ii) which is designed to produce an effect, by heat, light, sound, gas or smoke or a combination of these, of non-detonative self-sustaining exothermic chemical reaction. (B) Gas: (1) A gas is a substance which— (i) at 50 oc has a vapour pressure greater than 300 kPa; or (ii) is completely gaseous at 20 oc at a standard pressure of 101.3 kPa. (2) Substances of gas are assigned to one of three following divisions based on the primary hazard of the gas during transport; (a) Flammable gases: Gases which at 20 oc and a standard pressure of 101.3 kPa,— (l) are igni table when a mixture of 13 per cent or less by volume with air; or (ii) have a flammable range with air of at least 12 percentage points regardless of the lower flammable limit. Flammability shall be determined by tests or by calculation in accordance with methods adopted by International Standards Organization [ISO: 1 0156•.1996] or by Bureau of Indian Standards [IS: 1446-1985 1; (b) Non-flammable, non-toxic gases: Gases which are transported a pressure not less than 280 kPa at 200, or as refrigerated liquids and which,— (i) are asphyxiant-gases which dilute or replace the oxygen normally in the atmosphere; (ii) are oxidizing-gases which may, generally by providing oxygen, cause or contribute to the combustion of other material more than air does; or {Hi) do not come under the other divisions; (c) Toxic gases: Gases which are known to be so toxic or corrosive to humans as to pose a hazard to health. 378 Substituted by G.S.R. 349(E), dated 1-6-2005, for Table H and Table HI (w.e.f. 1-6-2005). 152 Note.—Gases meeting the above criteria owing to their corrosivity are classified as toxic with a subsidiary corrosive risk. (C) Flammable chemicals: (l) Flammable gases.—Gases which at 20 oc and at standard pressure of 101.3 kPa are (a) igni table when a mixture of 13 per cent or less by volume with air, or (b) have a flammable range with air of at least 12 percentage points regardless of the lower flammable limits. Note.—The flammability shall be determined by tests or by calculation in accordance with methods adopted by International Standards Organization (ISO: 101 56: 1996) or by Bureau of Indian Standards (IS: 1446-1985). (ii) Extremely flammable liquids.—Chemicals which have flash point lower than or equal to 23 oc and boiling point less than 350. (iii) Very highly flammable liquids.—Chemicals which have a flash point lower than or equal to 23 oc and initial boiling point higher than 350. (iv) Highly flammable liquids.—Chemicals with a flash point lower than or equal to 60 oc but higher than 23 oc. (v) Flammable liquids.—Chemicals which have a flash point higher than 60 oc but lower than 90 oc. (D) Reactive Substances: Reactive substances are those substances which start reacting chemically with any other material and reducing gases through their own decomposition. Such substances are Inorganic Alkalies (for example NaoH, Iodine and the like) and Acids (for example H2S04, HN03, HCL and the like) (vi) Oxidizing Substances: (a) Oxidizing substances: Substances which, while in themselves not necessarily combustible, may generally by yielding oxygen, cause or contribute to the combustion of other material.

Such substances may be contained in an article; (b) Organic peroxides: Organic substances which contain the bivalent-0-0- structure and may be considered derivative of hydrogen peroxide, where one or both of the hydrogen atoms have been replaced by organic radials. Organic peroxides are thermally unstable substances which may undergo exothermic self-accelerating decomposition. In addition, they may have one or more of the following properties, — (i) be liable to explosive decomposition; (ii) burn rapidly; 153 (iii) be sensitive to impact or friction; (iv) react dangerously with other substances; (v) cause damage to the eyes. (F) Toxic: Toxic chemicals:—Chemical having the following values of acute toxicity and which owing to their physical and chemical properties, are capable of producing major accident hazards:— Sl. Toxicity No. 1 Extremely toxic 2 Highly toxic 3 Toxic 1 LD50 oral in rats Oral toxicity (mg/kg) >5 >5-50 >50-200 Dermal toxicity (mg/kg) Inhalation toxicity (mg/l) >200-1000 >2-10 2 LD50 coetaneous in rats or rabbits 3. LC50 by inhalation (four hours) in rats. (G) Radioactive: Radioactive materials mean any material containing radionuclide where both the activity concentration and the total activity in the consignment exceed the values specified, depending on the type of material by the Atomic Energy Commission of India. (H) Corrosive: Corrosive substances are substances which by chemical action will cause severe damage when in contact with living tissue or in the case of leakage will materially damage or even destroy other goods or the means of transport. They may also cause other hazards. 154 TABLE 111 List of Hazardous Goods F T Sr. No. 1 2 1 Methylpiperidine 3 1, 1 -Difluoroethylene (Refrigerated Gas RI 132a) 4 1,2-Dichloro-l, (Refrigerated Gas RI 14) 5 1, 1, 1,2-Teffafluoroethane (Refrigerant Gas R134a) 6 1, 1, 1 -Trifluoroethane (Refrigerant Gas R 143a) 1, 1, -Trichloroethane 7 8 1, 1 -Dichloro-I-Niffoethane 9 1, 1 -Dichloroethane 10 1, 1 -Dif luoroethane 11 1, 1 -Dimethoxyethane 12 13 14 1,2-Butylene Oxide, Stabilized 15 1,2-Di-(Dimethylamino) Ethane 16 3-one 17 1 ,2-Dichloroethylene 18 1 ,2-Dichloropropane 19 1,2-Dimethoxyethane 20 1,2-Epoxy-3-Ethoxypropane 21 1,2-Propylenediamine 22 1,3,5-Trimethylbenzene 23 1, 3-Dichloroacetone 24 1,3-Dichloropropanol-2 25 1, 3-Dimethylbutylamine 26 1,4-Butynediol 27 1,5,9-Cyclododecatriene 28 1 -Bromo-3-chloropropane 29 1 -Bromo-3-Methylbutane 30 I-Chloro-l, I-Dif luoroethane (Refrigerant Gas R 142b) 31 I-Chloro-2,2,2-Trifluoroethane (Refrigerant Gas R 133a) 155 E—Exp10sive, Ra—Radioactive, Name 1 Hexene Flammable, Toxic, 0—0xidising, G—Gas. R Reactive, C Corrosive, c 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 1 -Ethylpiperidine 1 -Methoxy-2-Propanol 1 -Pentol 2-(2-Aminoethoxy) Ethanol 2,2-Dimethylpropane 2,4-Toluylenediamine 2,2'-Dich10rodiethy1 Ether 2,3 Dihydropyran 2,3-Dimethylbutane 2-Amino-4,6-Dinffophenol Wetted 2-Amino-4-Chlorophenol 2-Amino-5-Diethylaminopentane 2-Bromo-2-Niffopropane-l, 3-Diol 2-Bromoethyl Ethyl Ether 2-Bromopentane 2-Chloroethanal 2-Chloropropane 2-Chloropropene 2-Chloropropionic Acid, Solid 2-Chloropropionic Acid, Solution 2-Chloropyridine 2-Diethylaminoethanol 2-Dimethylaminoacetoniü•ile 2-Dimethylaminoethanol 2-Dimethylaminoethyl Acrylate 2-Dimethylaminoethyl Methacrylate 2-Ethylaniline 2-Ethylbutanol 2-Ethylbutyraldehyde 2-Ethylhexyl Chloroformate 2-Ethylhexylamine 2-lodobutane 2-Methyl-l-Butene 2-Methyl-2Butene 2-Methy1-2-1Teptanethios 2-Methyl-5-Ethylpyridine 2-Methylfuran 2-Methylpentan-2-OL 2-Trifluoromethylaniline 3, 3 -Diethoxypropene 156 c c 1 c c c 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 3, 3 '-Iminodipropylaminc 3 -Bromopropyne 3-Chloro-4-Methylphenyl Isocyanate 3-Chloropropanol-l 3-Methyl-l-Butene 3-Methylbutan-2-One 3-Niffo-4-Chlorobenzotrifluoride 3-Trifluoromethylanilinc 4 Methoxy-4-Methylpentan 2-one 4,4'-Diaminodiphenylmethane 4-Chloro-o-Toluidine Hydrochloride 4-Methylmorpholine(N-Methylmorpholine) 4-Thiapcntanal 5-Viethy lhexan-2-one 5-Niffobenzotriazol 5-tert-Butyl-2, 4,6-Triniffo-m-Xylene 9-Phosphabicyclononanes (Cyclooctadiene Phosphines Acetaldehyde Acetaldehyde Ammonia Acetic Acid Acetic Acid Solution Acetic Acid, Glacial or Acetic Acid Solution Acetic Anhydride Acetic Cyanothydrin Acetone Acetone Cyanohydrin Acetone Cyanohydrine (2-Cyanopropan-2-OL) Acetone Oils Acetone Thiosemicarbazide Acetoniffile Acetyl Bromide Acetyl Chloride Acetyl Iodide Acetyl Methyl Carbinol Acetylene Acetylene (Ethyne) Acetylene Teffa Chloride 157 c c 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 142 144 146 150 151 152 Acridine Acrolein (2-Propenal) Acrolein Dimer, Stabilized Acrylamide Acrylic Acid, Stabilized Acryloniffile Adiponiffile Aerosols Aircraft 1 lydraylic Power Unit Fuel Tank Alcoholates Solution, N.O.S. Alcoholic Beverages Alcohols, Flammable, Toxic, N.O.S. Alcohols, N.O.S. Aldehydes, Flammable, Toxic, N.O.S. Aldehydes, N.O.S. Aldicarb Aldol Alkali Metal Alloy, Liquid, N.O.S. Alkali Metal Amalgam Alkali Metal Amide Alkali Metal Dispersion or

Alkaline Earth Metal Dispersion Alkaline Earth Metal Alcoholates, N.O.S. Alkaline Earth Metal Amalgam Alkaline Metal Alcoholates, Self-Heating, Corrosive, N.O.S. Alkaloids, Liquid, N.O.S. or Alkaloid Salts, Liquid, N.O.S. AlkylPhthalate Alkylphenols, Liquid, N.O.S. Alkylphenols, Solid, N.O.S. Alkylsulphuric Acids Alkysulphonic Acids, Liquid Arkysulphonic Acids, Liquid Alkylsulphonic Acids, Liquid or Arylsulphonic Acids, Liquid Alkysulphonic Acids,Solid or Arylsulphonic Acids, Solid Allyl Alcohol Allyl Alcohol (2-Propen-1-OL) Allyl Amine Allyl Bromide Allyl Chloride Allyl Chloroformate Allyl Glyddyl Ether Allyl Iodide Allylamine Allyltrichlorosilane, Stabilized Alpha Naphthyi Thiourea Alpha-Methylbenzyl Alcohol 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 220 221 222 223 224 225 226 227 228 229 230 231 232 233 A1 pha-Methyl val eraldehyde Al pha-Naphthylamine Alpha-Pinene Aluminium (Powder) Aluminium Alkyl Haldies, Liquid/Solid Aluminium Alkyl Hydrides Aluminium Alkyls Aluminium Azide Aluminium Borohydride Aluminium Bromide Solution Aluminium Bromide, Anhydrous Aluminium Carbide Aluminium Chloride Aluminium Chloride Solution Aluminium Chloride, Anhydrous Aluminium Fluoride Aluminium Hydride Aluminium Nin-ate Aluminium Phosphide Aluminium Phosphide Pesticide Aluminium Resinate Aluminium Smelting By-Products or Aluminium Remelting By- Products Amines, Flammable, Corrosive, Flammable M.O.S. Polyaines, Liquid, Corrosive, Flammable, N.O.S. Amines, Flammable, Corrosive, N.O.S. or Polyaines, Flammable, Corrosive, N.O.S. Amines, Liquid, Corrosive, N.O.S. or Polyaines, Flammable, Liquid, Corrosive, N.O.S. Amines, Solid, Corrosive, N.O.S. or Polyamines, Solid, Corrosive, N.O.S. Amino Diphenyl Amyl Niffate Amylamine Amyltrichlorosilane Anabasine Aniline Aniline 2,4,6-Trimethyl Aniline Hydrochloride Anisidine-P Anisidines Anisole Anisoyl Chloride Anthraquinone Anthrawuinone Antimony and Compounds 159 oooogooo c c 234 235 236 237 238 239 240 241 242 243 244 245 246 247 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 Antimony Hydride (Stibine) Arasenous Trichloride Argon, Refrigerated Liquid Arsenic and All Arsenic Compounds in any Form Arsenic Hydide (Arsene) Arsenic Pentoxide, Arsenic (V) Acid and Salts Arsenic Trioxide, Arsenious (Ill) Acids and Salts Asbestos Aviation Regulated Liquid, N.O.S./ Solids, N.O.S. Azinphos-Ethyl Azinphos Methyl Azoidic Arbonamide Barium Azide Barium Br ornate Barium Chlorate Barium Cyanide Barium Hypochlorite Barium Nin-ate Barium Nin-ide Barium Oxide Barium Perchlorate Barium Permanganate Barium Peroxide Batteries Fluid, Alkali Batteries wet, Filled with Acid Batteries Wet, Filled with Alkali Batteries wet, Non-Spillable Batteries, containing Sodium, or Cells, containing Sodium Batteries, Dry, containing Potassium Hydroxide Solid Benxoyl Peroxide Benzal Chloride Benzaldehyde Benzenamine, 3-Trifluoromethyl Benzene Benzene Arsenic Acid Benzene Chloride Benzene Sulfonyl Chloride Benzene, 1-(Chloromethyl)-4 Niü•o Benzene, 1-(Chloromethyl) 4-Niffo Benzenesul phony 1 Chloride Benzidine Benzidine Salts 160 h 1 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 Benzimidazole, 4,5-Dichloro-2 (Trifluoromethyl) Benzoniffile Benzoquinone Benzoquinone-P Benzotrichloride Benzoyl Chloride Benzoyl Peroxide Benzyl Bromide Benzyl Chloride Benzyl Chloroformate Benzyl Cyanide Benzyl Iodide Benzyl dimethylamine Benzylidene Chloride Beryllium (Powder) Beryllium (Powders, Compounds) Beryllium Compound, N.O.S. Beryllium Nin-ate Beryllium Powder Bibyridilium Pesticide Solid, Toxic Bibyridilium Pesticide, Liquid, Flammable, Bicyclo (2,2, 1) Heptane-2-Carboniü•ile Toxic Bicylco (2.2.1) Hepta-2,5-Diene, Stabilized (2,5-Norbornadiene, Stabilized) Biphenyl Bipyridilium Pesticide, Liquid, Toxic Bipyridilium Pesticide, Liquid, Toxic, Flammable BIS BIS Amine BIS (2-Chloromethyl) Sulphide BIS (2-Ch10romethy1) Ketone BIS (Chloromethyl) Ether BIS (Chloromethyl) Ketone 161 i 1 c r 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 BIS (Terbutylperoxy) Butane BIS (Tert-Butyl Peroxy) Cyclohexane BIS (Tert-Butylperoxy Butane, -2,2) BIS (Tert-Butylperoxy) Cyclohexane, BIS (Tert-Butylperoxy) Cyclohexane- BIS (Tert-Butylperoxy, Butane, 2, -2) BIS, 1,2Tribromophenoxy-Ethane Bismuth & Compounds Bisphenol Bisulphates, Aqueous Solution Bisulphites, Aqueous Solution, N.O.S. Bi toseanate Blue Asbestos or Brown Asbestos Bombs, Smoke, Non-Explosive Boron and Compounds Boron Powder Boron Tribyomide Boron Trichloride Boron Trifluoride Boron Trifluoride Acetic Acid Complex Boron Trifluoride Comp. with Methyl-Ether 1.1 Boron Trifluoride Diethyl Etherate 162 c c Ra T c c O c c c r c 330 331 332 333 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 428 429 430 431 432 433 434 435 436 437 438 440 441 442 443 444 445 446 447 Boron Trifluoride Dihydrate Boron Trifluoride Dimethyl Etherate Boron Trifluoride

Propionic Acid Complex Boron Trifluoride, Compressed Calcium Permanganate Calcium Peroxide Calcium Resinate Calcium Silicide Calcium, Pyrophoric or Calcium Alloys, Pyrophonc Camphor Camphor Oil Caprioc Acid Carbamate Pesticide, Liquid, Toxic Carbamate Pesticide, Liquid, Toxic Carbamate Pesticide, Liquid, Toxic, Flammable Carbamate Pesticide, Solid, Toxic Carbaryl (Sevin) Carbofuran Carbofuran (Furadan) Carbon Dioxide Refrigerated Liquid Carbon Disulphide Carbon Monoxide Carbon Monoxide and Hydrogen Mixture, Compressed Carbon Teffabromide Carbon Teffachloride Carbon, Activated Carbonyl Fluoride, Compressed Carbonyl Sulphide Carbophenothion Carffidges Caustic Alkali Liquid, N O S Cehulose Nin-ate Celluloid Celluloid, Scrap Cellulose Nin-ate Cerium Chemical Sample, Toxic Chloral, Anhydrous, Stabilized Chlorates (Used in Explosives) Chlorates, Inorganic, Aqueous Solution, N O S 163 c c 448 449 450 2281 2282 2283 2284 2285 2286 2287 2288 2289 2290 2291 2292 2293 2294, 2295 2296 2297 2298 2299 2300 2301 2302 2303 2304 2305 2306 2307 2308 2309 2310 2312 2313 2314 2315 2316 2317 2318 2319 Chlorfenvinphos Chloric Acid, Aqueous Chlorinated Benzenes Vinylidene Chloride, Stabilized Vinylpyridines, Stabilized Vinyltoluenes, Stabilized Vinyltrichlorosilane, Stabilized Vutyl Amine Tert Warfarin Warfarin Sodium Water-Reactive Liquid, N.O.S. Water-Reactive solid, N.O.S. White Asbestos Xanthates Xenon, Compressed Xenon, Refrigerated Liquid Xylene Xylene Dichloride Xylenes Xylenols Xylidine Xylidines, Liquid /Solid Xylyl Bromide Zinc Ammonium Niffite Zinc and Compounds Zinc Arsenate, Zinc Arsenite or Zinc Arsenate And Zinc Arsenite Mixture Zinc Bromate Zinc Chlorate Zinc Chloride Solution Zinc Cyanide Zinc Dichloropentaniffile Zinc Dithionite (Zinc Hydrosulphite) Zinc Fluorosilicate Zinc Resinate Zirconium and Compounds Zirconium Nin-ate Zirconium Picramate Zirconium Powder, Dry Zirconium Scrap Zirconium Teffachloride Zirconium, Dry 164 o o o o c c c T] CHAPTER VI CONTROL OF TRAFFIC 138. Signals and additional safety measures for T motor vehicle].—(l) The driver of a 379[motor vehicle] shall make such signals and on such occasions as are specified in the regulations made under section 118. (2) The driver of a motor cycle shall, in addition to the safety measures mentioned in sub-section (1) of section 128, comply with the requirements of rule 123. 380 381 [(3) In a motor vehicle, in which seat-belts have been provided under sub-rule (1) or sub-rule (1 -A) of rule 125 or rule 125-A, as the case may be, it shall be ensured that the driver, and the person seated in the front seat or the persons occupying front facing rear seats, as the case may be, wear the seat belts while the vehicle is in motion.] (4) On and after expiry of one year from the date of commencement of the Central Motor Vehicles (Amendment) Rules, 1999, the driver of every vehicle shall ensure that the following items are carried in the vehicle, namely:— (a) in case of vehicles other than motor cycles, a set of spare bulbs for headlamp and fuses, and a spare wheel ready for use; (b) tool kit as prescribed by the manufacturer; (c) triangles of size 150 mm with a red reflecting surface as per IS: 8339 — 1993 specified by the Bureau of Indian Standards, for keeping in front and rear of the vehicle in case the vehicle is stranded on the road (applicable to vehicles other than two,and three-wheelers); as specified below, namely:— one triangle in case of four-wheelers with GVW not exceeding 7.5 tons; two triangles in case of four-wheelers with GVW exceeding 7.5 tons: 382[Provided that in case of vehicles manufactured on and after 1st January, 2003, the triangles of size and specification shall conform to AIS : 022-2001 , as may be amended from time to time, till such time as corresponding Bureau of Indian Standards specifications are notified:] 383[Provided further that in addition, M3 and N3 category of vehicles shall also be required to install retro-reflective triangle complying to AIS:022:2001 as amended from time to time, excluding the requirements specified in clauses 7.2,7.3,7.4,7.7, 8.1.2 and 379 380 381 382 383 . Substituted by G.S.R. 21 4(E), dated 18-3-1999, for "motor cycle" (w.e.f. 18-3-1999). Inserted by G.S.R. 21 4(E), dated 18-3-1999 (w.e.f. 18-3-1999). Sub-R. (3) substituted by G.S.R. 699(E), dated IO-1 0-2002 (w.e.f. IO-1 0-2002). Inserted by G.S.R. 400(E), dated 31-5-2002 (w.e.f. 31-5-2002). Proviso inserted by G.S.R. 589(E), dated 16-9-2005 (w.e.f. 16-3-2006). 165 of Annexure 4 of the said standard. The colour of the triangle fitted in the front of the vehicle shall be white and that of rear shall be red. The location of both the triangles shall be at least one meter above the ground level at the front and rear, preferably at the centre of the vehicle. For the purposes of "white colour warning triangle", the word "red" shall be substituted by word "white", wherever applicable in AIS:022:2001. The colour requirements of white retro-reflective portion shall be as per clause 8.5 of AIS:057 and white fluorescent material shall be as per clause 7.1 of ISO:7591 -82(E);] (d) first-aid kit containing a tube of antiseptic cream containing 0.5% of Centrimide B.P. in a non-greasy base, sterilised dressings, sterlised elastic plaster, waterproof plaster, gauze and elastic bandage for wounds and burns, (e) number of chock blocks for four-wheelers as

specified below, namely:— one chock block in case of four-wheelers with GVW exceeding 4 tons and less than 7.5 tons; two chock blocks in case of 4-wheelers with GVW exceeding 7.5 tons; The vehicle manufacturer shall ensure that the above items are supplied at the time of first sale of vehicle; at the time of purchase of the two wheeler, the manufacturer of the two wheeler shall supply a protective headgear conforming to specifications prescribed by the Bureau of Indian Standards under the Bureau of Indian Standards Act, 1986 (63 of 1986): Provided that these conditions shall not apply to category of persons exempted in terms of section 129 and the rules made thereunder by the concerned State Government.] (5) Halogen bulbs with P45t cap shall not be used for headlights on all vehicles. Wattage of halogen bulbs shall not exceed 70/75 watts for 24 volts and 60/65 for 12 volts systems.] 385[139. Production of licence and certificate of registration.—The driver or conductor of a motor vehicle shall produce certificate of registration, insurance, fitness and permit, the driving licence and any other relevant documents on demand by any police officer in uniform or any other officer authorized by the State Government in this behalf, and if any or all of the documents are not in his possession, he shall produce in person an extract or extracts of the documents duly attested by any police officer or by 384 Cl. if) inserted by G.S.R. 589(E), dated 16-9-2005 (w.e.f. 16-3-2006). 385 Substituted by G.S.R. 76(E), dated 31-1-2000 (w.e.f. 31-1-2000). substituted by G.S.R. 684(E), dated 5-10-1999 (w.e.f. 22-10-1999). 166 Earlier R. 138 was any other officer or send it to the officer who demanded the documents by registered post within 15 days from the date of demand.] CHAPTER INSURANCE OF MOTOR VEHICLES AGAINST THIRD PARTY RISKS 140. Definitions.—ln this Chapter, unless the context otherwise requires,— "accounting year" means the year commencing on the first day of April, and ending with the 31 st day of March of the following year; (ii) "approved list" means the list of foreign insurers and their guarantors maintained by the Central Government under these rules; (iii) "Authority" means the Central Government or a State Government or any local authority or any State Transport Undertaking, motor vehicles owned by whom have been exempted from the compulsory insurance under sub-section (2) of section 146; (iv) "bank" means a company which accepts, for the purpose of lending or investment, deposits of money from the public repayable on demand or otherwise, and withdrawal by cheque, draft, order or otherwise; Explanation.— Any company which is engaged in the manufacture of goods or carries on any trade and which accepts deposits of money from the public merely for the purpose of financing its business as such manufacturer or trader shall not be deemed to be a bank within the meaning of this clause; (v) "certificate of foreign insurance" means a certificate issued by a foreign insurer in

Form 57 in compliance with these rules; (vi) "foreign insurer" means a person or firm carrying on the business of insurance incorporated or domiciled outside India and not registered under the Insurance Act, 1938 (4 of 1938); (vii) "fund" means the fund established under rule 151 ; (viii) "Government security" means a Government security as defined in the Public Debt Act, 1944 (18 of 1944); (ix) "guarantor" means an insurer who has guaranteed a foreign insurer in pursuance of these rules, and "guarantee", "guaranteed" and "guaranteeing" have corresponding meanings; (x) "visitor" means a person bringing a motor vehicle into India and making only a temporary stay therein not extending to a continuous period of more than one year. Inland insurance 167

141. Certificate of insurance.—An authorised insurer shall issue to every holder of a policy of insurance, a certificate of insurance in Form 51 in respect of each such vehicle

142. Cover notes.—(l) Every cover note issued by an authorised insurer shall be in Form 52. (2) A cover note referred to in sub-rule (1) shall be valid for a period of sixty-days from the date of its issue and the insurer shall issue a policy of insurance before the date of expiry of the cover note

143. Issue of certificates and cover notes.—Every certificate of insurance or cover note issued by an insurer in compliance with the provisions of this Chapter shall be duly authenticated by such person as may be authorised by the insurer

144. Transfer of certificate of insurance.—When the ownership of a motor vehicle covered by a valid insurance certificate is transferred to another person together with the policy of insurance relating thereto the policy of insurance of such vehicle shall automatically stand transferred to that other person from the date of transfer of ownership of the vehicle and the said person shall within fourteen days of the date of transfer intimate to the authorised insurer who has insured the vehicle, the details of the registration of the vehicle, the date of transfer of the vehicle, the previous owner of the vehicle and the number and date of the insurance policy so that the authorised insurer may make the necessary changes in his record

145. Exclusion of advertising matter.—No certificate of the insurance or cover note issued in pursuance of Chapter Xl of the Act and of this Chapter shall contain any advertising matter either on the face or on the back thereof

146. Certificates or cover notes lost, destroyed, torn, soiled, defaced or) Where the holder of a policy—(a) lodges with an authorised insurer a declaration in which he declares that a certificate of insurance or cover note issued to him by such insurer has been lost, destroyed, torn, soiled, defaced or mutilated and sets out full particulars of the circumstances connected with the loss or destruction of the certificate or cover note and the efforts made to find it; or (b) returns to the authorised insurer the certificate of insurance or cover note issued to him by such insurer in a torn, soiled, defaced or mutilated condition; and (c) pays to the insurer a fee of rupees twenty in respect of each such certificate or cover note, the authorised insurer shall, if satisfied that such certificate or cover note has been lost or destroyed and that all reasonable efforts have been made to find it, or that it has 168 been destroyed or is soiled, defaced or mutilated, as the case may be, issue in lieu thereof a duplicate certificate of insurance or cover note with the word "Duplicate" prominently endorsed to the effect. (2) When a duplicate certificate or cover note has been issued in accordance with the provisions of sub-rule (1) on representation that a certificate or cover note has been lost, and the original certificate or cover note is afterwards found by the holder, the original certificate or cover note, as the case may be, shall be surrendered to the insurer

147. Records to be maintained by authorised insurers.—Every authorised insurer shall keep a record of the following particulars in respect of every policy of insurance issued by him for a period of five years, namely:— (i) full name and address of the person to whom the policy is issued; (ii) in the case of a policy relating to a specified motor vehicle, the registration mark and the number of such vehicle and in other cases, description of the vehicle covered; (iii) the date on which the policy of insurance comes into force and the date of its (iv) the conditions subject to which the persons or classes of persons specified in the policy of insurance will be indemnified; (v) the number and date of issue of every certificate of insurance or cover note issued in connection with the policy of insurance; (vi) the date, if any, on which any duplicate certificate of insurance or cover note was issued; (vii) whether, after the issue of duplicate, the original certificate of insurance was found and subsequently surrendered to the insurer and if so, on which date

148. Records of exempted vehicles.—(l) In the case of a motor vehicle owned by any of the authorities specified in sub-section (2) of section 146 as also in the case of motor vehicles exempted under sub-section (3) of section 146, a certificate in

Form 53 signed by a person authorised in that behalf by such authorities may be produced in evidence that the motor vehicle is not being driven in contravention of section 146. (2) The authority referred to in sub-section (2) or exempted under sub-section (3) of section 146 shall keep a record of the motor vehicles owned by it in respect of which a policy of insurance has not been obtained and of any certificates issued by it under these provisions in respect of such vehicles, and of the names and addresses of the 169 persons to whom such certificates have been issued and of the cancellation of any such certificates

149. Supply of information.—Any person, authority or authorised insurer required under the provisions of this Chapter to keep records of documents shall furnish on request without any charge any particulars thereof to the Central Government or a State Government or to any police officer authorised in this behalf by the State Government

150. Furnishing of copies of reports to Claims Tribunal.—(l) The police report referred to in sub-section (6) of section 158 shall be in

Form 54. (3) A registering authority or a police officer who is required to furnish the required information to the person eligible to claim compensation under section 160, shall furnish the information in Form 54, within seven days from the date of receipt of the request and on payment of a fee of rupees ten

151. Establishment of fund.—(l) Each of the authorities referred to in subsection (3) of section 146 shall establish a fund for meeting any liability arising out of the use of any motor vehicle of that authority or any person in its employment may incur to third parties including liability arising under the Workmen's Compensation Act, 1923 (8 of 1923)

152. Amount of the fund.—(l) The fund shall be established with an initial amount of not less than rupees five lakhs and the said amount shall be kept in deposit with a bank or the Government. (2) Subject to the provisions of sub-rule (3), the authority shall pay into the fund at the beginning of each accounting year in respect of its vehicles in running condition a sum of not less than rupees two hundred per vehicle. Explanation.—ln this sub-rule "vehicles in running condition" means all the vehicles of the authority which are expected to be in operation at any time during the accounting year. (3) When the fund exceeds rupees twenty lakh or rupees two thousand arid five hundred per vehicle for the entire fleet of vehicle, whichever is less, annual payment referred in sub-rule (2) shall cease provided that if thereafter the amount at the credit of the fund falls below rupees twenty lakhs or rupees two thousand and five hundred per vehicle for the entire fleet of vehicles, whichever is less, such annual payment shall again be resumed: Provided that if any authority other than the Central Government is of opinion that the amount of rupees twenty lakhs or rupees two thousand and five hundred per vehicle for the entire fleet of vehicles, whichever is less, is not adequate, it may, with the previous 170 approval of the Central Government continue the annual payment beyond rupees twenty lakhs or rupees two thousand and five hundred per vehicle, as the case may be

153. Investment of the fund.—From the amount at the credit of the fund the authority shall keep and maintain a cash deposit of not less than rupees fifty thousand in the bank and the rest of the amount at the credit of the fund shall be invested in Government securities

154. Securities held as a deposit in the fund.—(l) All Government securities in which the fund is invested shall be transferred to the bank by the authority. (2) It shall be competent for the authority at any time to exchange the Government securities for cash or for other Government securities of equal or greater market value, or both, and the bank shall carry out the instructions issued by the authority for such exchange after charging the usual commission to the authority. The securities so exchanged shall also be transferred to the bank

155. Deposit procedure.—(l) As soon as the fund is established, the bank shall send to the authority a statement specifying the assets held by it on behalf of the authority and shall also send a copy thereof to the Central Government in the Ministry of Surface Transport or the State Government concerned, as the case may be. (2) The statement referred to in sub-rule (1) shall be sent in the same mariner and to the same authorities whenever there is a change in the assets of the authorities held by the bank

156. Interest on deposits.—lnterest realised on each deposit or the securities held in the fund shall be paid by the bank to the authority

157. Withdrawal.—(l) No amount shall be withdrawn from the fund except for the purpose of meeting any liability arising out the use of any motor vehicle of the authority which the authority or any person in the employment of the authority may incur to third parties including liability arising under the Workmen's Compensation Act, 1923 (8 of 1923). (2) The authority shall, subject to such conditions and restrictions as it may impose in this behalf, authorise one of its officers to draw money from the fund for the purpose mentioned in sub-rule (1). (3) A copy of the authorisation referred to in sub-rule (2) duly authenticated by a competent officer of the authority shall be sent to the bank which shall permit withdrawal only by the officer named in such authorization subject to the conditions and restrictions contained therein. 171

158. Settlement of claims.—The authority shall comply with such directions as the Central Government or the State Government, as the case may be, may, from time to time issue, with respect to the procedure to be followed for settlement of claims which are to be met out of the funds. Foreign insurance 159. List of foreign insurers.—(l) The Central Government shall publish in the Official Gazette a list (hereinafter referred to as the approved list) of foreign insurers who have been guaranteed in accordance with the provisions of this Chapter, together with the name of the guarantor or guarantors in each case and shall

also publish from time to time any addition to or removal from the approved list. (2) No foreign insurer's name shall be added to the approved list until such foreign insurer has been guaranteed by at least one insurer and the name of the foreign insurer who ceases to have at least one guarantor shall be removed from the list

160. Guarantor of foreign insurer.—(l) An insurer who desires to guarantee a foreign insurer shall make application therefore to the Central Government in

Form 55. (2) The Central Government may, if it is satisfied that the application referred to in sub- rule (1) is in order and that it is expedient that the foreign insurer be placed in the approved list or, where the name of the foreign insurer is already included in the approved list, that the insurer should be added to the approved list as guarantor of the foreign insurer, and the name of the foreign insurer to the approved list if it is not already included, and include the insurer as a guarantor of such foreign insurer. (3) A guarantor desiring to cease guaranteeing a foreign insurer shall give notice of not less than two months to the Central Government in Form 56, and where such notice has been given, the guarantor shall be deemed to have ceased to guarantee the foreign insurer from the date specified in the notice: Provided that the insurer shall be deemed, in respect of all certificates of foreign insurance endorsed or renewed in accordance with the provisions of sub-rule (2) of rule 161 before the date of such cessation, to continue as the guarantor of the foreign insurer who has issued the certificate as if the guarantor had not ceased to be his guarantor. (4) If at any time a guarantor ceases to be an insurer, the Central Government may, after giving such notice as may appear to it to be necessary, remove from the approved list the name of such guarantor wherever it appears: Provided that the guarantor who ceases to be an insurer shall be deemed, in respect of all certificates of foreign insurance endorsed in pursuance of the provisions of sub-rule 172 (2) of rule 161 before the date of removal of the name of the guarantor from the approved list, to continue as the guarantor of the foreign insurers as if the guarantor had not ceased to be an insurer and as if his name had not been removed from the list

161. Endorsement of certificate of foreign insurance.—(l) A visitor wishing to have a certificate of foreign insurance endorsed or re-endorsed shall produce such certificate in Form 57 before the Customs Collector at a port of entry or land customs post or to such other officer as the Central Government may, by notification in the Official Gazette appoint, for the purpose of endorsement in accordance with the provisions of this Chapter or for the purpose of the renewal of any endorsement already made on the certificate in accordance with this Chapter. (2) Such officer shall, if satisfied that the certificate of foreign insurance complies with the requirements of the provisions of this Chapter, that the period of validity of such certificate in India has not expired, that the certificate has been issued by a foreign insurer in the approved list and that the guarantor specified in the certificate is shown in the approved list as a guarantor of the foreign insurer, make an endorsement thereon in Form 58. (3) The period of validity of an endorsement or of the renewal of an endorsement made as aforesaid shall not in any case extend beyond the date on which the certificate of foreign insurance ceases to be effective in India: Provided that when a visitor obtains a fresh certificate of foreign insurance during the period of his stay in India, the period of validity of an endorsement made upon it added to the period of validity of an endorsement or endorsements that may have been made upon the original certificate, shall not exceed one year in all

162. Validity of certificate of foreign insurance.—A certificate of foreign insurance carrying an endorsement in accordance with the provisions of rule 161 shall have effect as if it were a certificate of insurance issued by the guarantor specified in it and shall be deemed to comply with the requirements of Chapter Xl of the Act; and the policy to which it relates shall also be deemed to have been issued by such guarantor and to comply with the requirements of Chapter Xl of the Act

163. Maintenance of records by the guarantor.—Every guarantor shall in respect of certificates of foreign insurance issued under his guarantee by the foreign insurer whom he has guaranteed and every person who has ceased to be a guarantor shall, in respect of the certificate of foreign insurance issued under his guarantee by the foreign insurer whom he had guaranteed at any time in the preceding five years, keep a record of such 173 particulars relating to the policies in connection with which the certificates of foreign insurance were issued as are required to be kept by insurers under the provisions of rule 147 in respect of policies, and the necessary additions to those records required to make them up to date shall be made as soon as is reasonably possible in the circumstances. CHAPTER OFFENCES, PENALTIES AND PROCEDURE 164. Offences for the purpose of section 208.—The offences for the purpose of sub- section (1) of section 208 shall be— (a) Driving during the period of disqualification (section 23); (b) Failure to stop the vehicle when it is involved in an accident (section 132); (c) Obtaining or applying for a driving licence without giving particulars of endorsement (section 182); (d) Driving dangerously (section 1 84); (e) Driving while under the influence of drinks or drugs (section 185); (f) Abetment of an offence under section 184 or section 185 or section 188; (g) Taking part in unauthorised race or trial of speed of any kind

(section 189); (h) Altering a driving licence or using an altered licence; (i) Any other offence punishable with imprisonment in the commission of which a motor vehicle was used. 174